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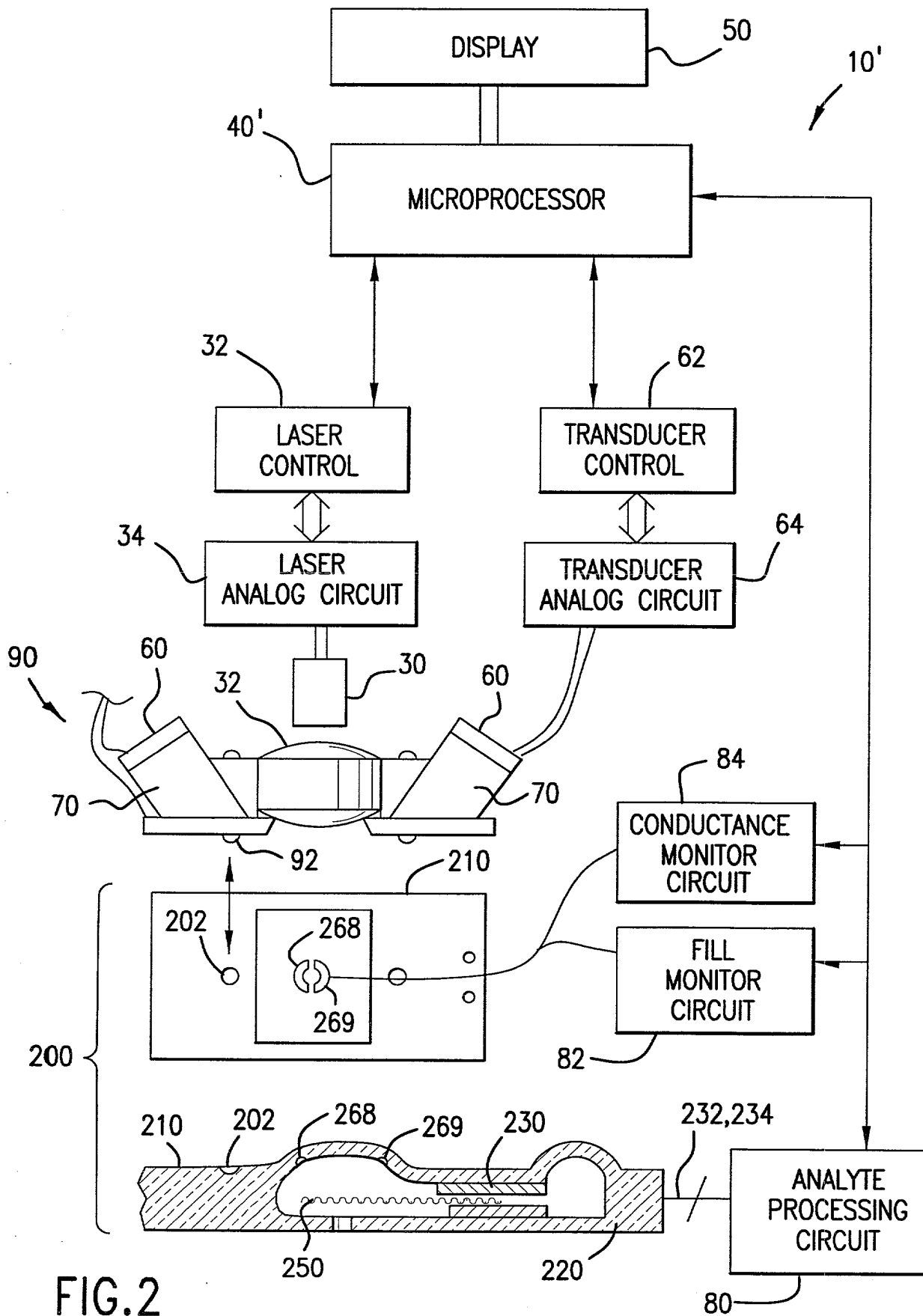


FIG.2

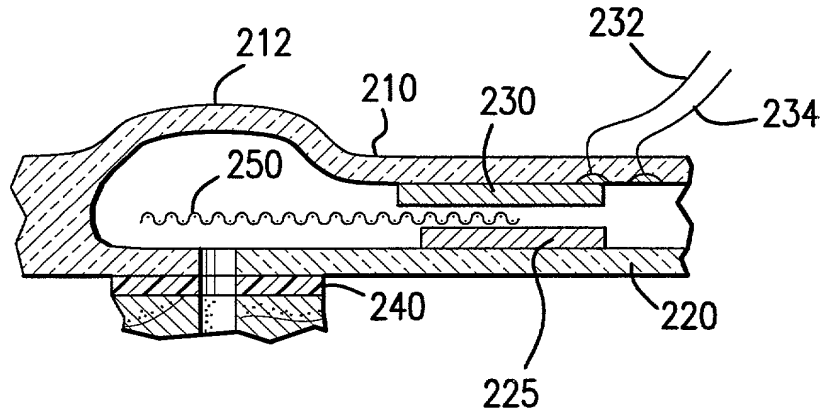


FIG. 3

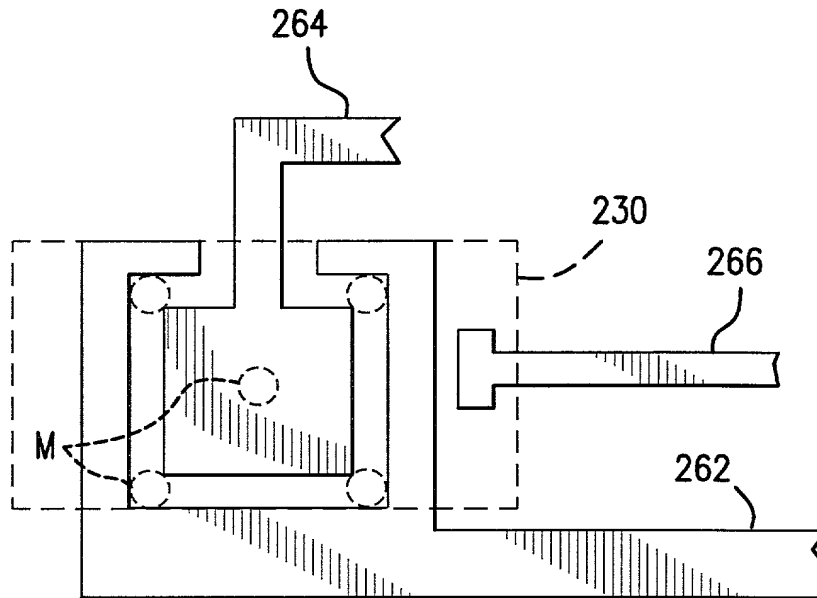


FIG. 4

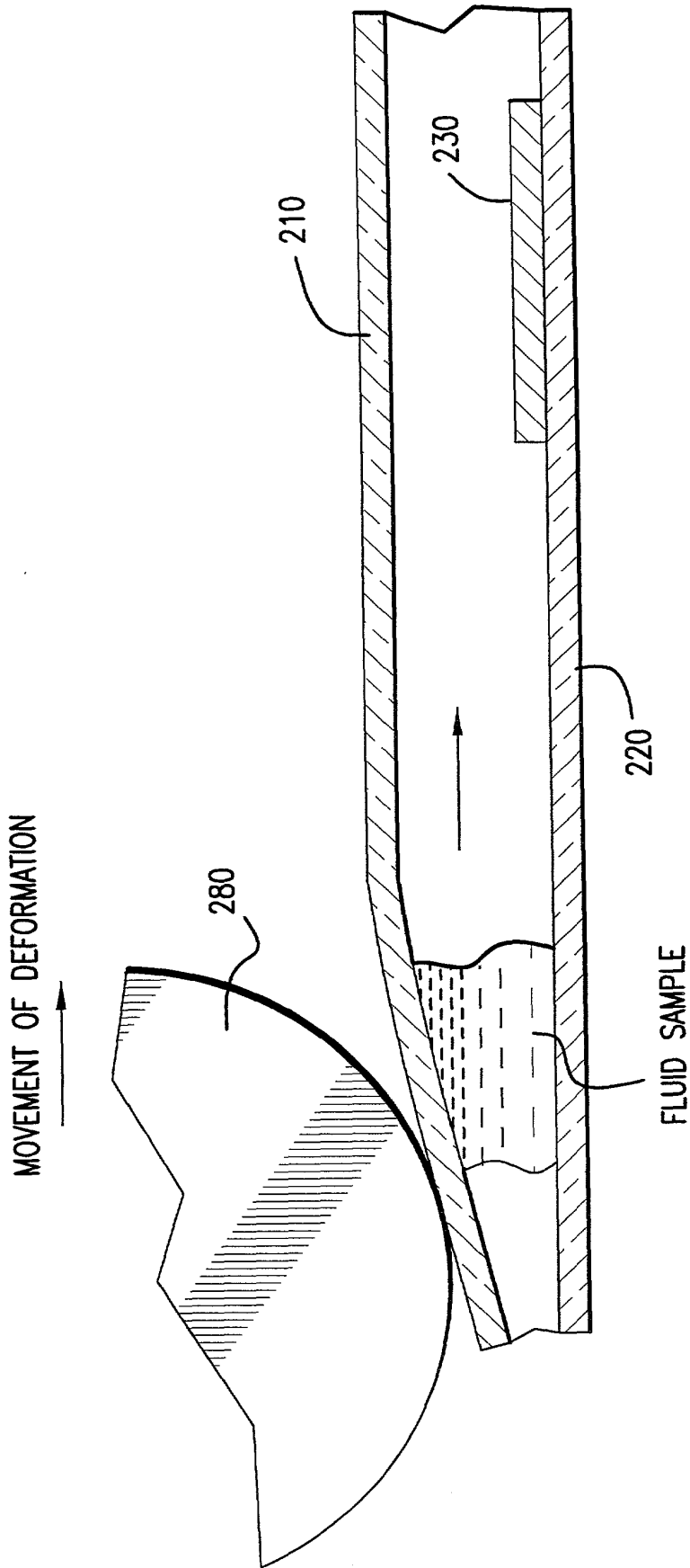
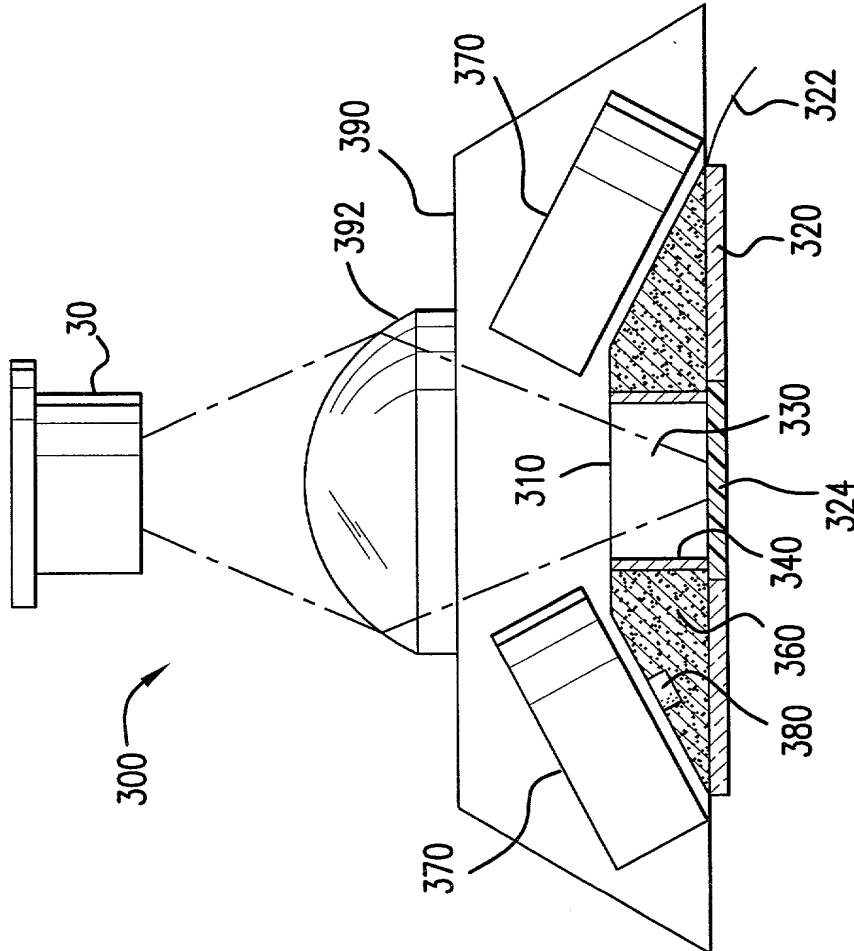
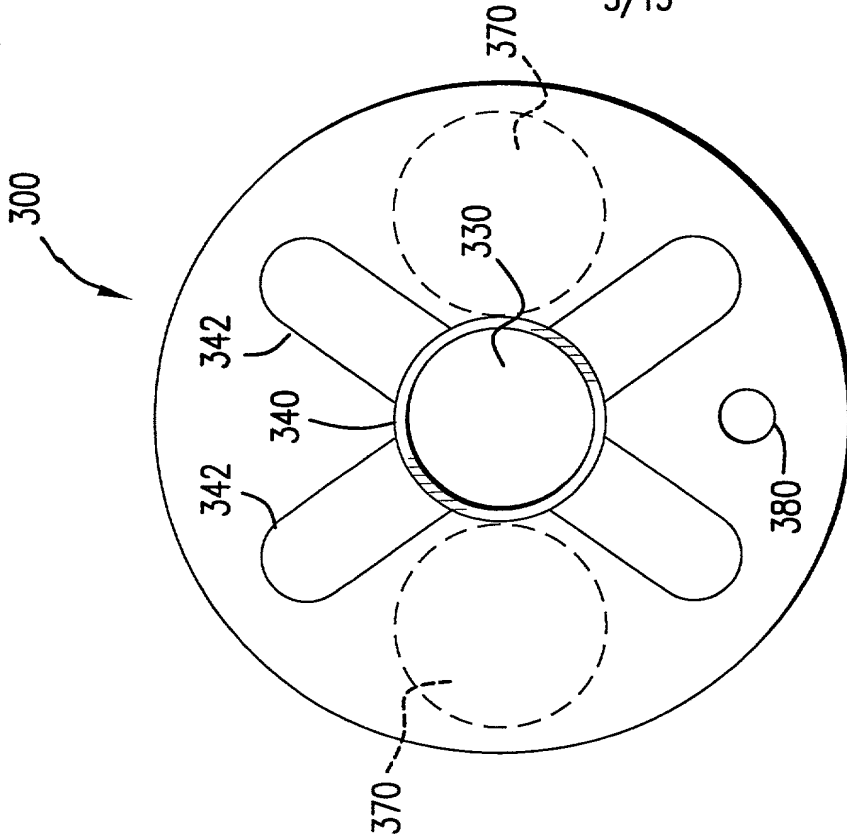


FIG.5



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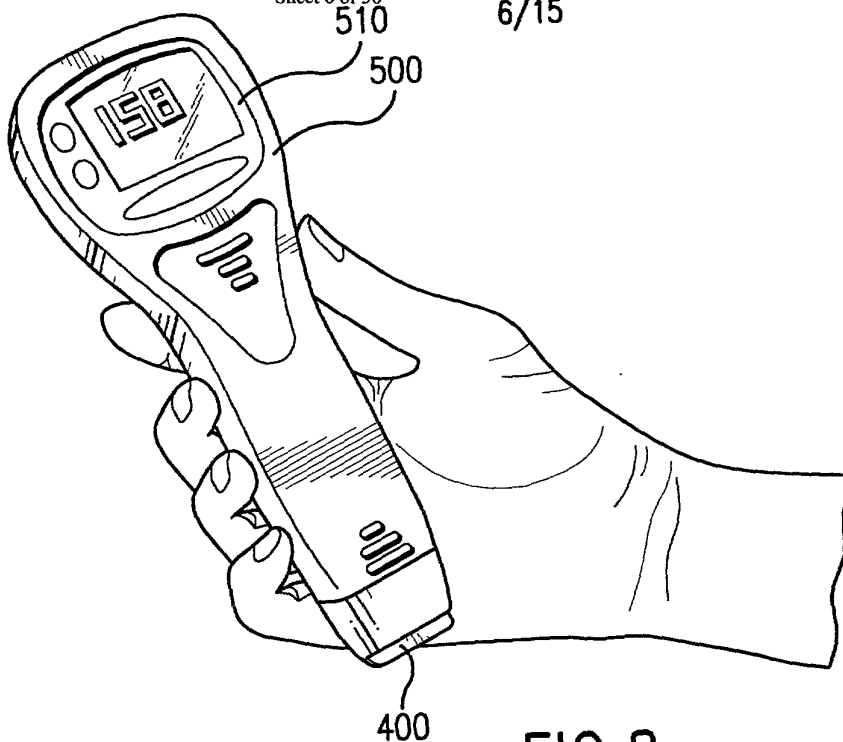


FIG. 8

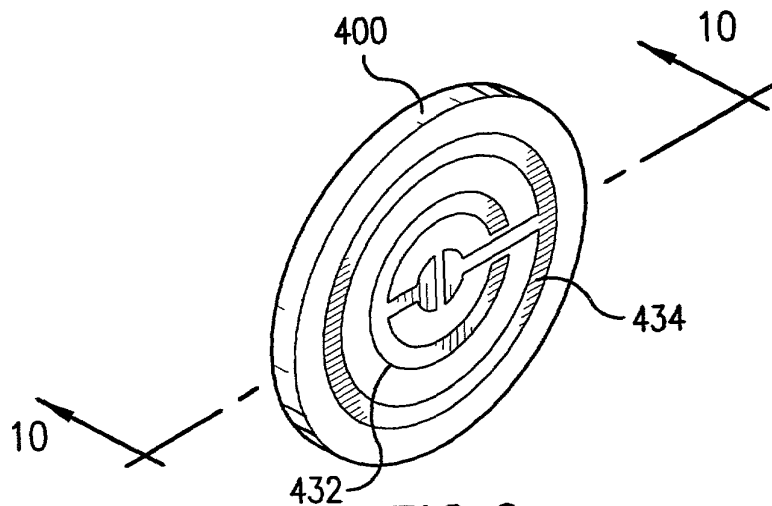


FIG. 9

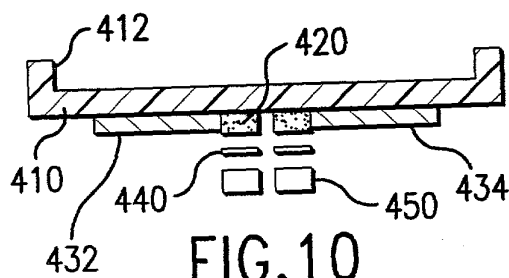


FIG. 10

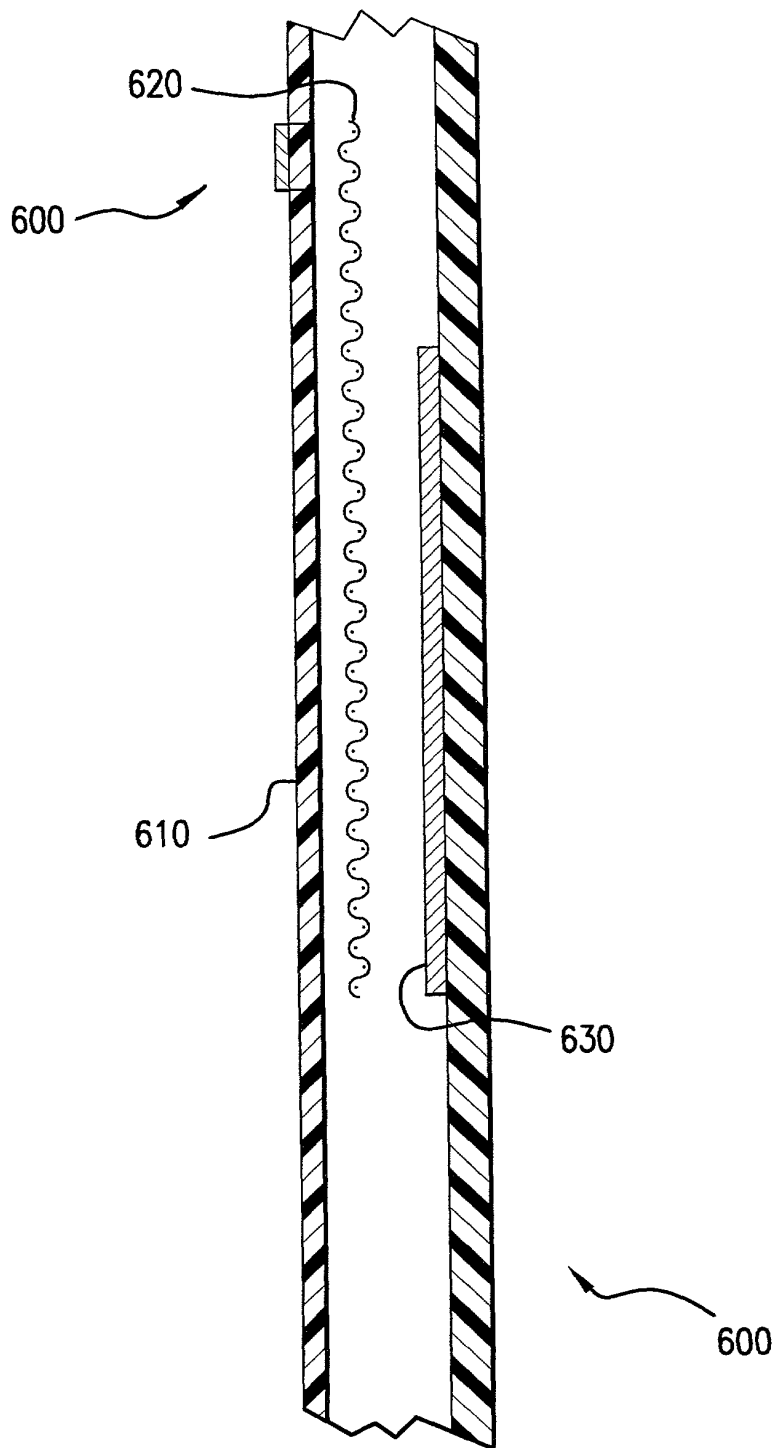


FIG.11

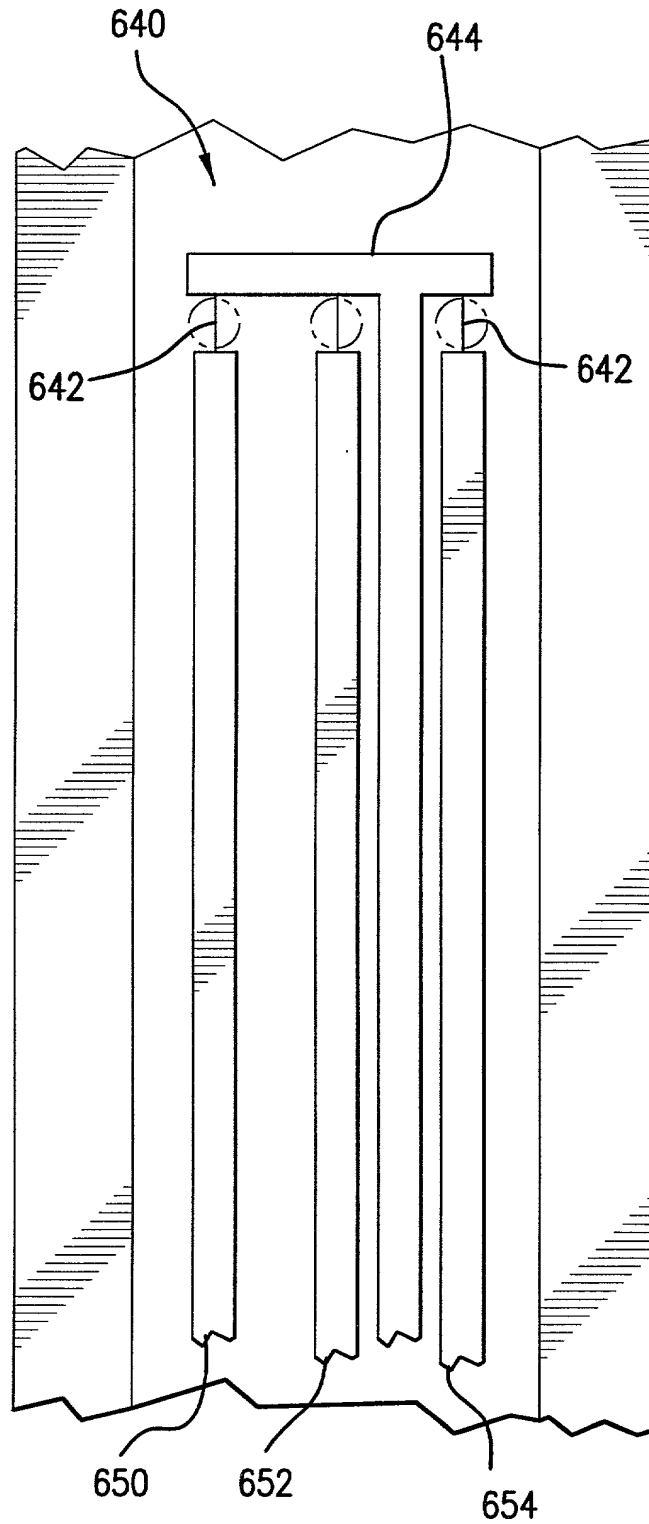


FIG.12



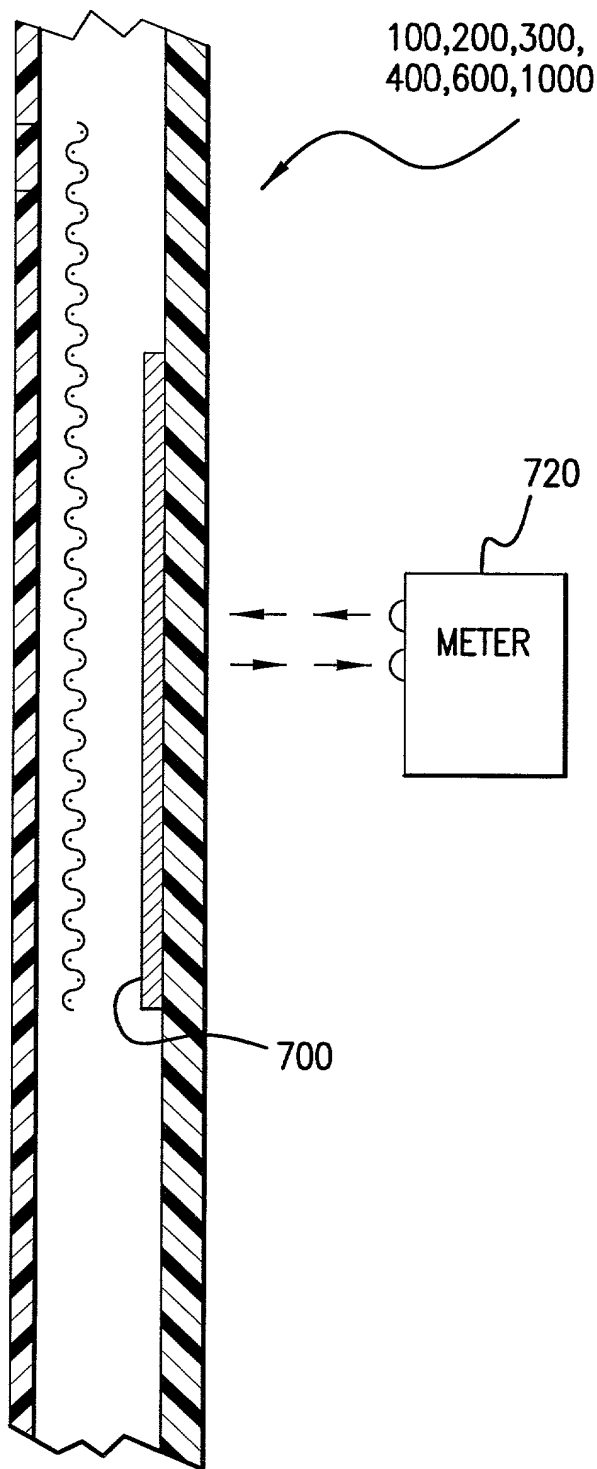


FIG.13

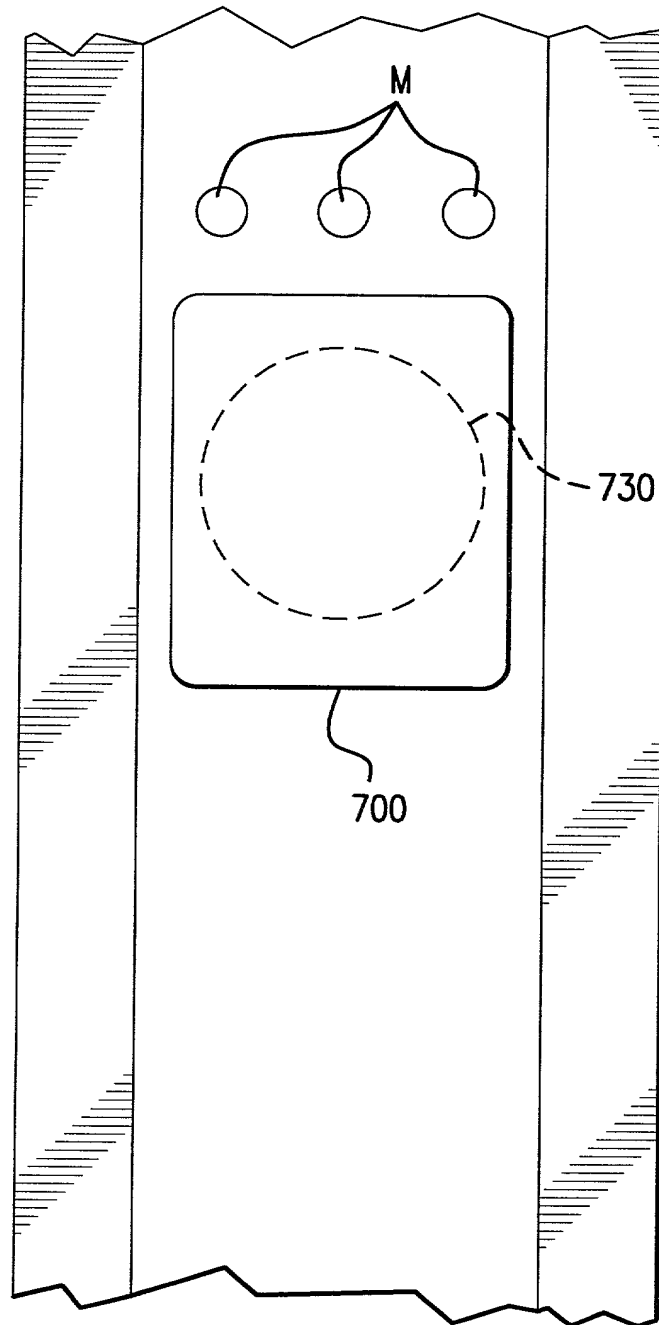


FIG.14

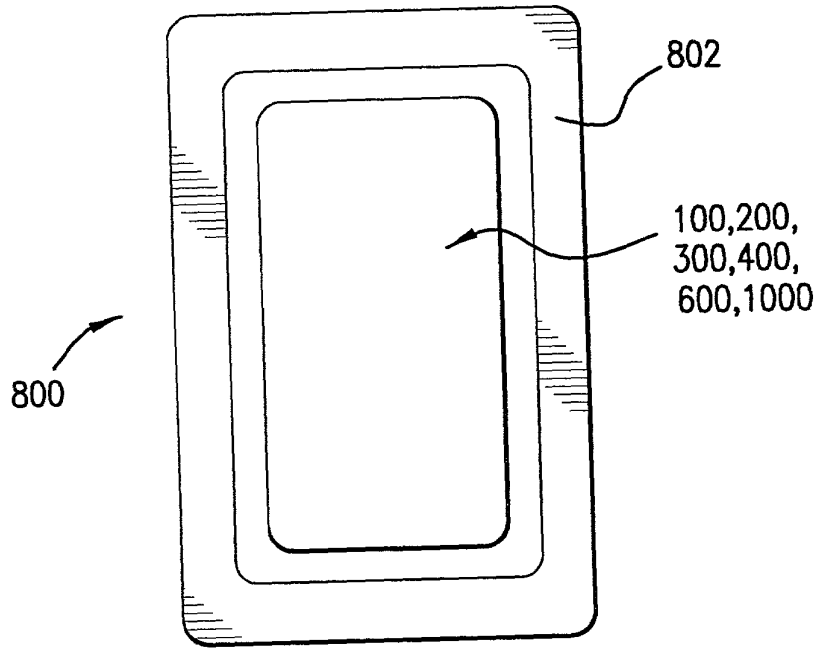


FIG. 15

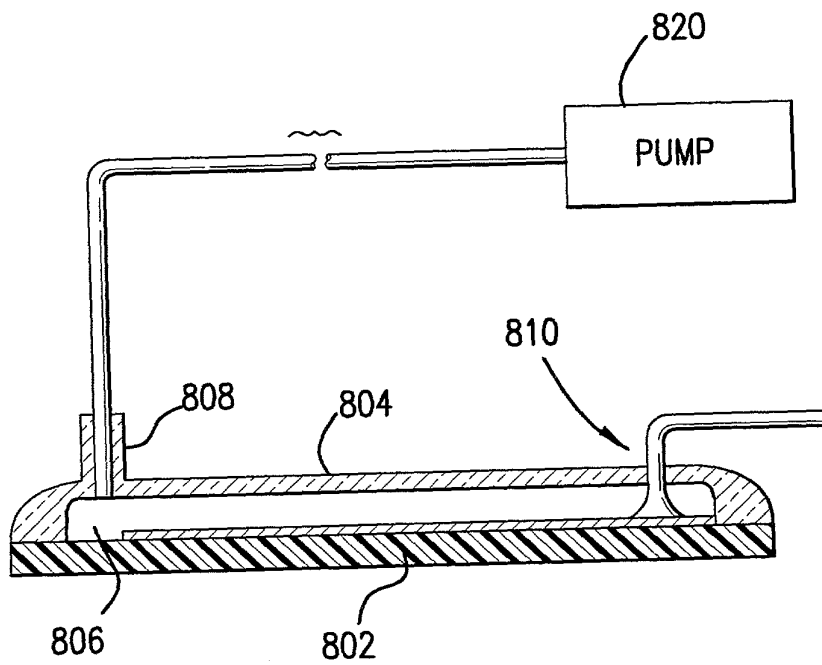


FIG. 16

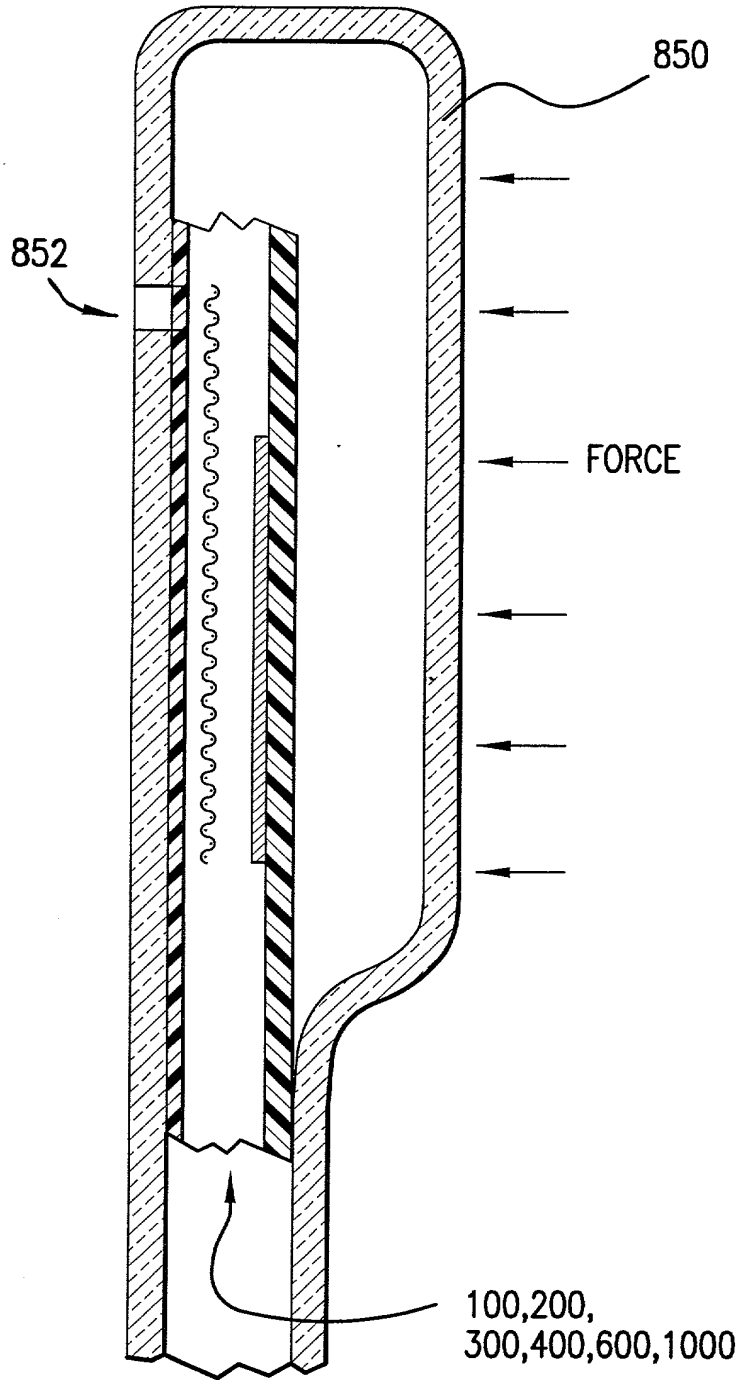


FIG.17

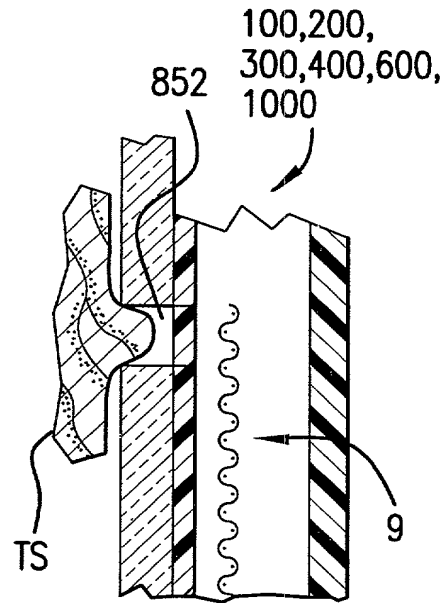
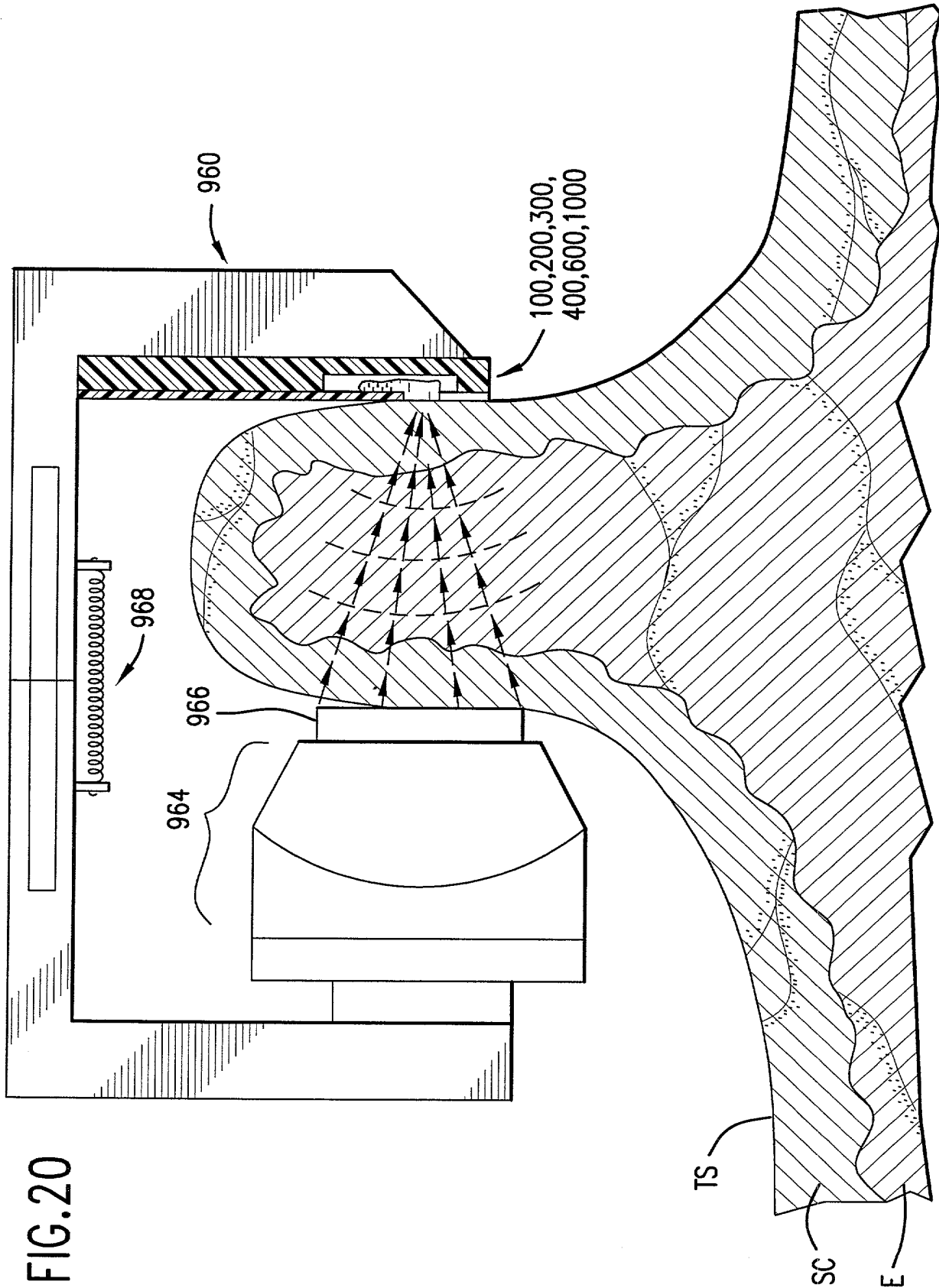


FIG.18



**FIG. 19**



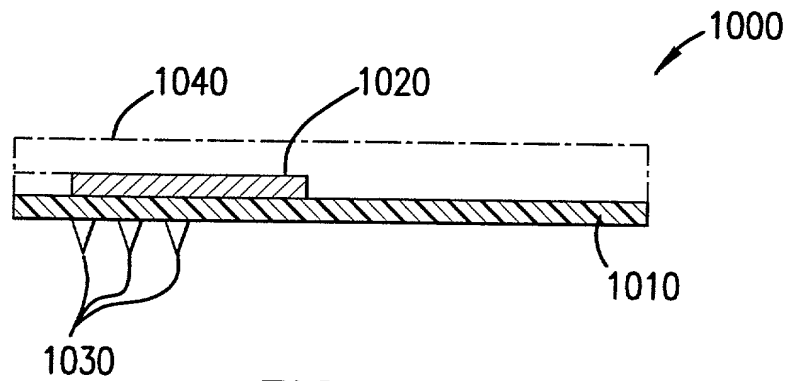


FIG. 21

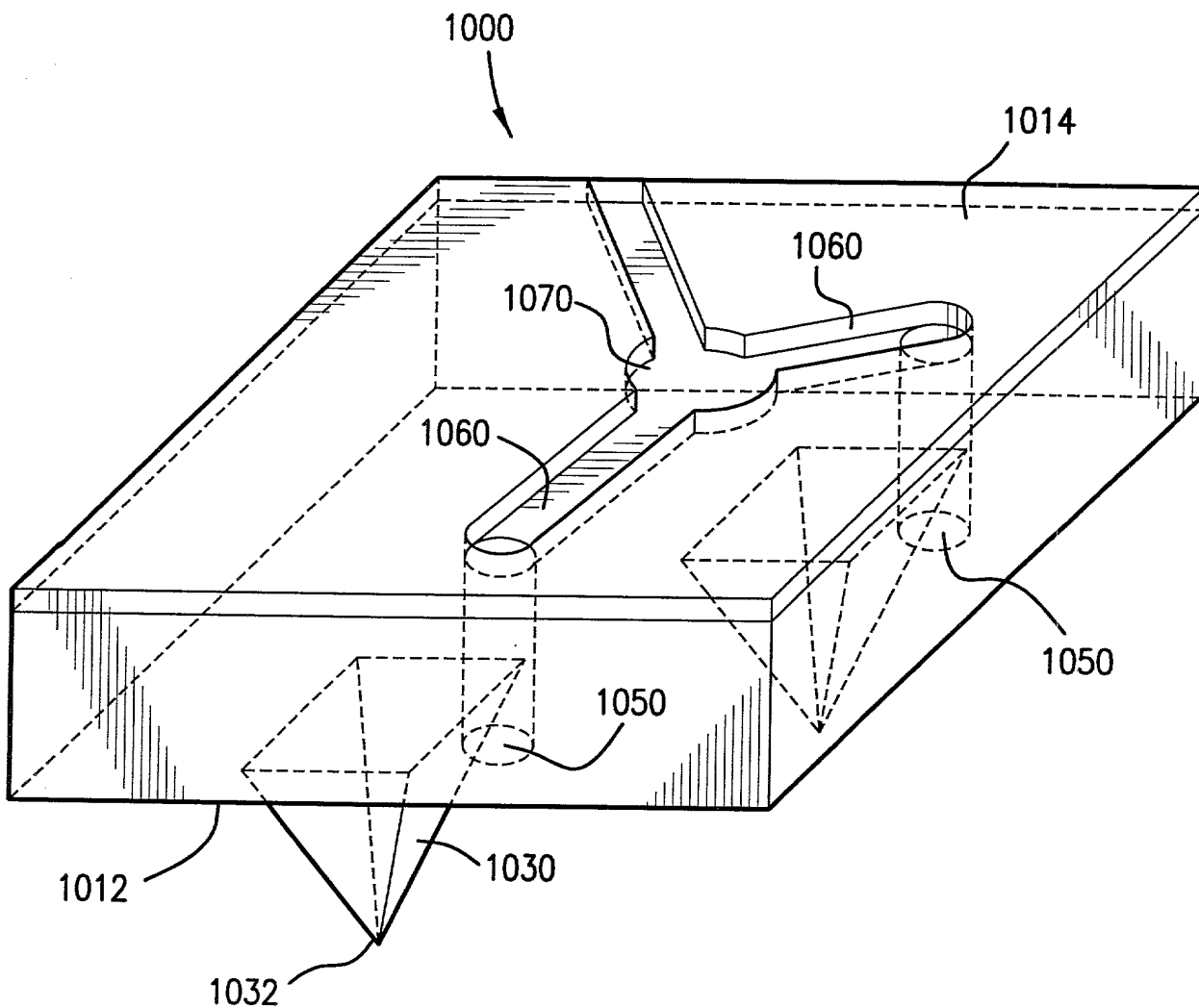


FIG. 22

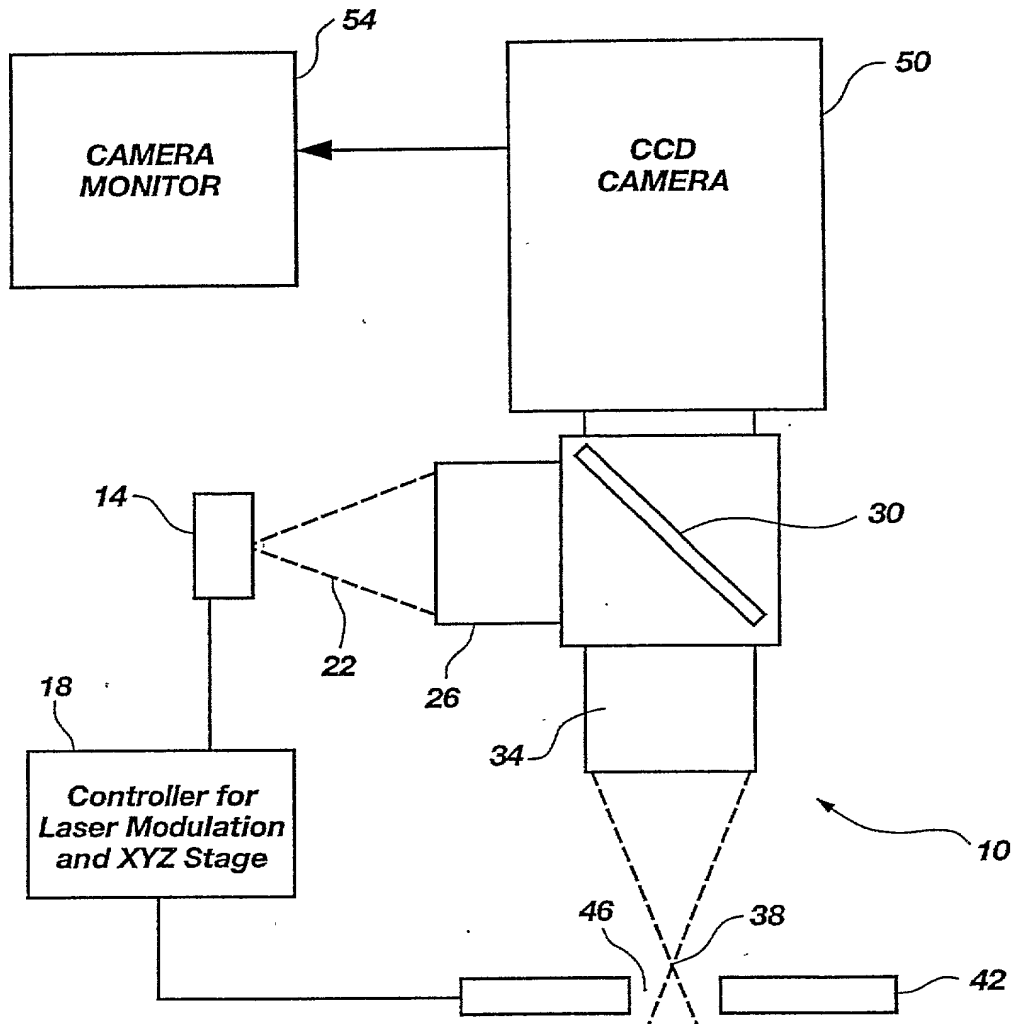
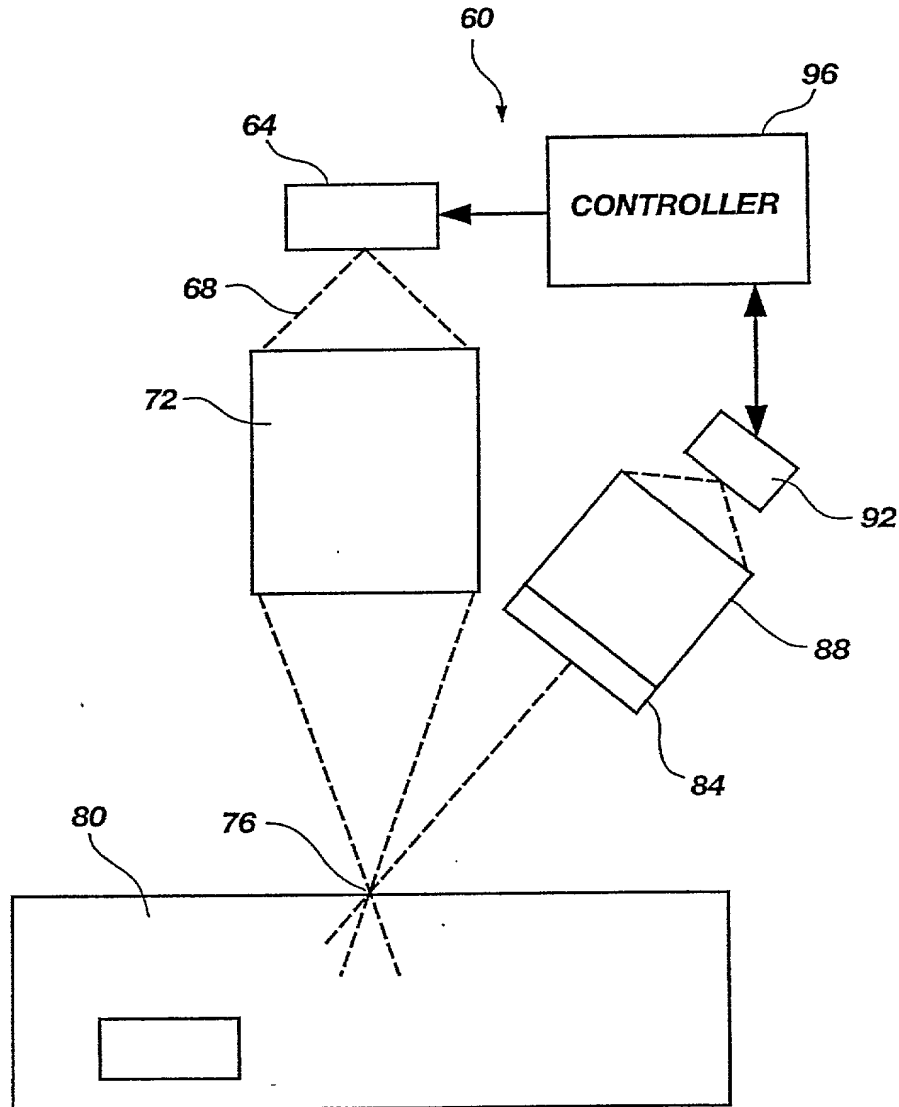


Fig. 23





**Fig. 24**

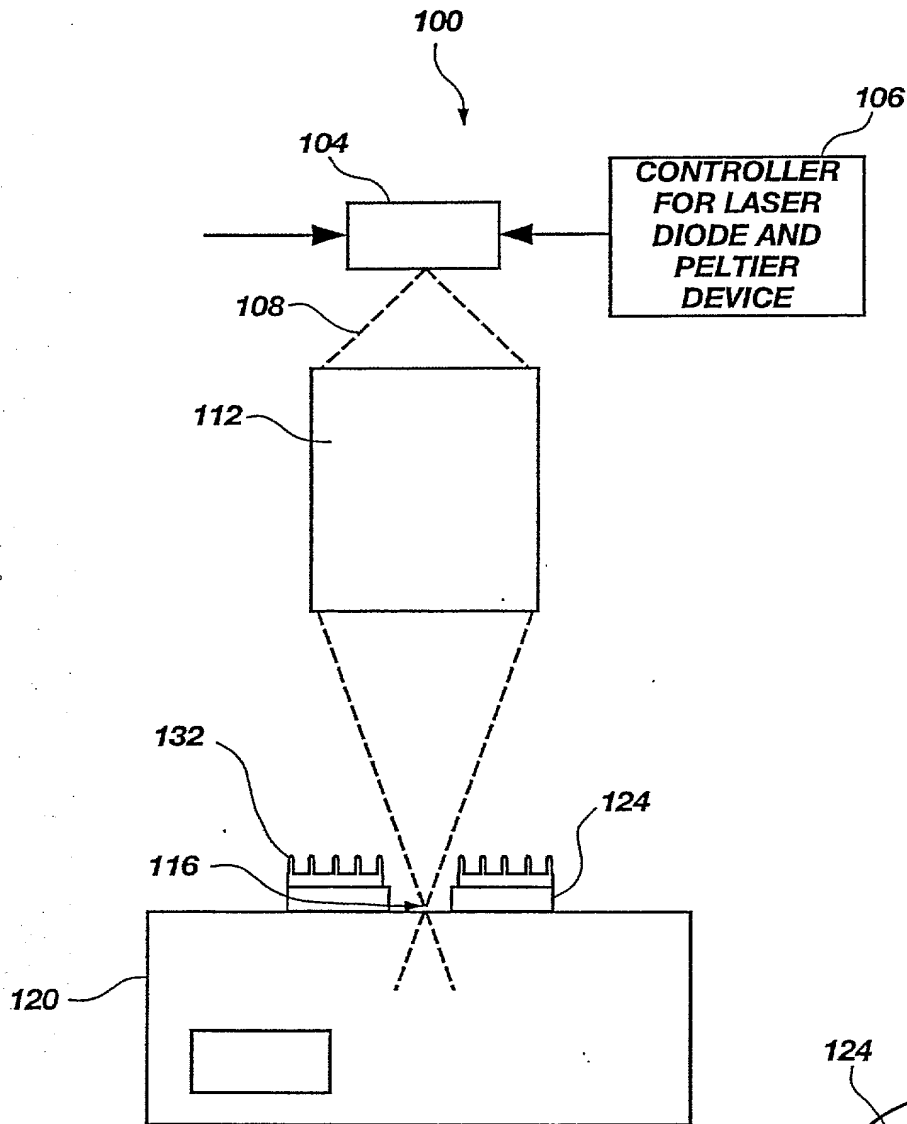


Fig. 25A

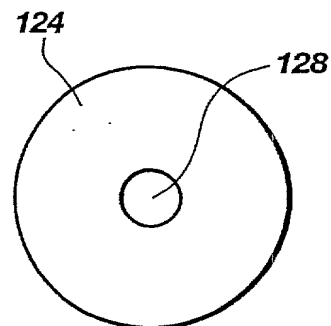
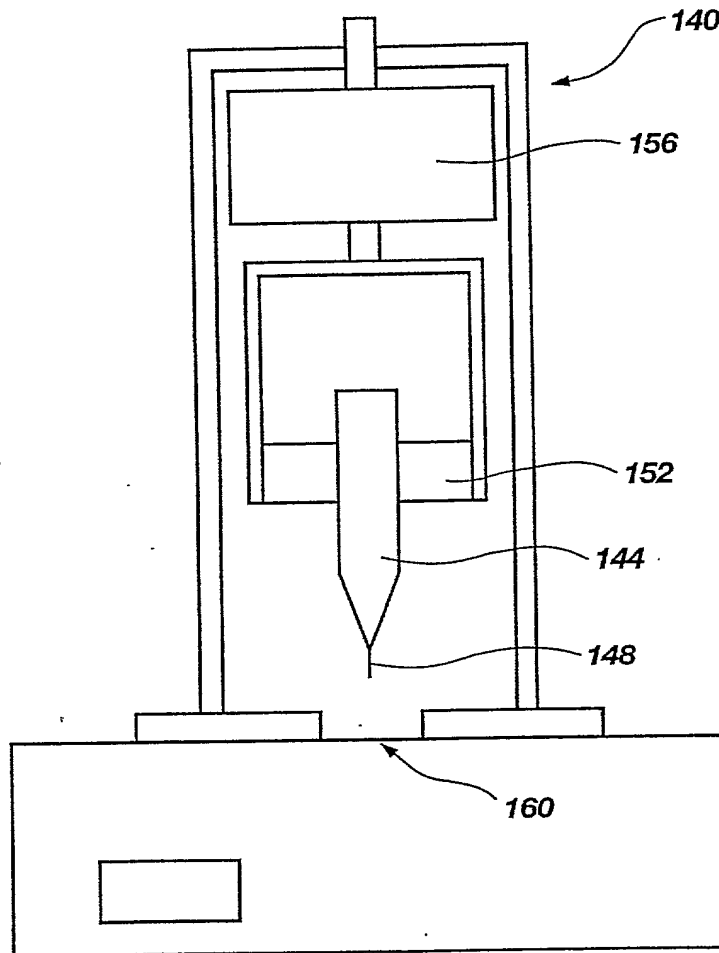
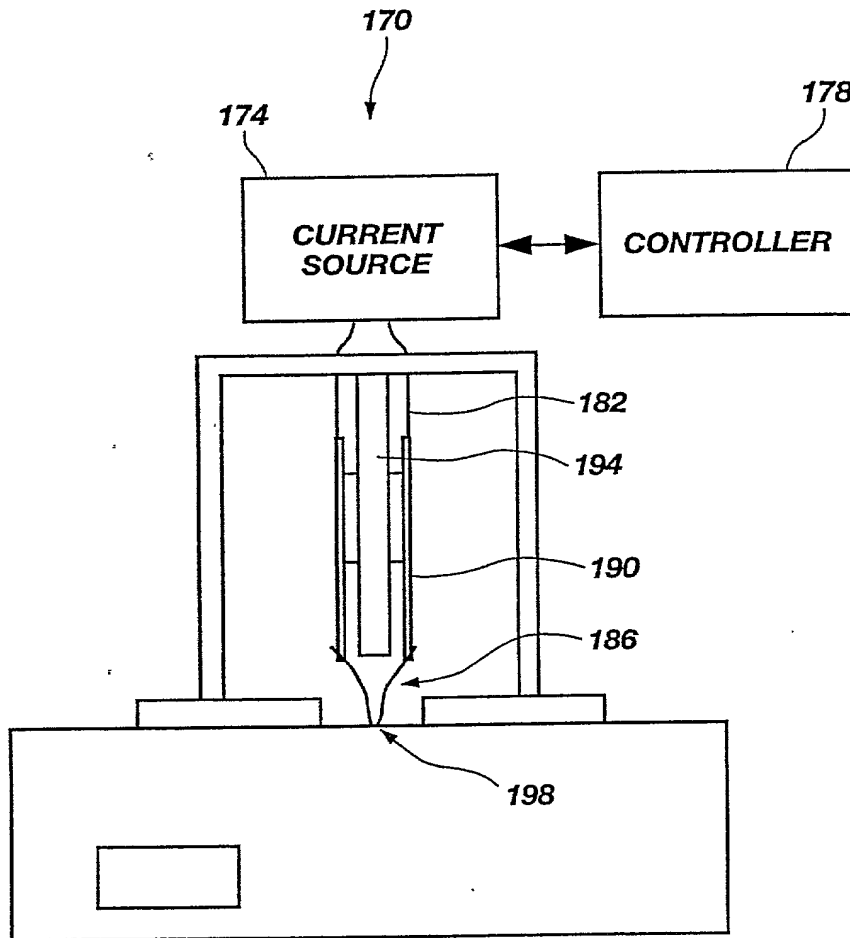


Fig. 25B



**Fig. 16**



**Fig. 3**

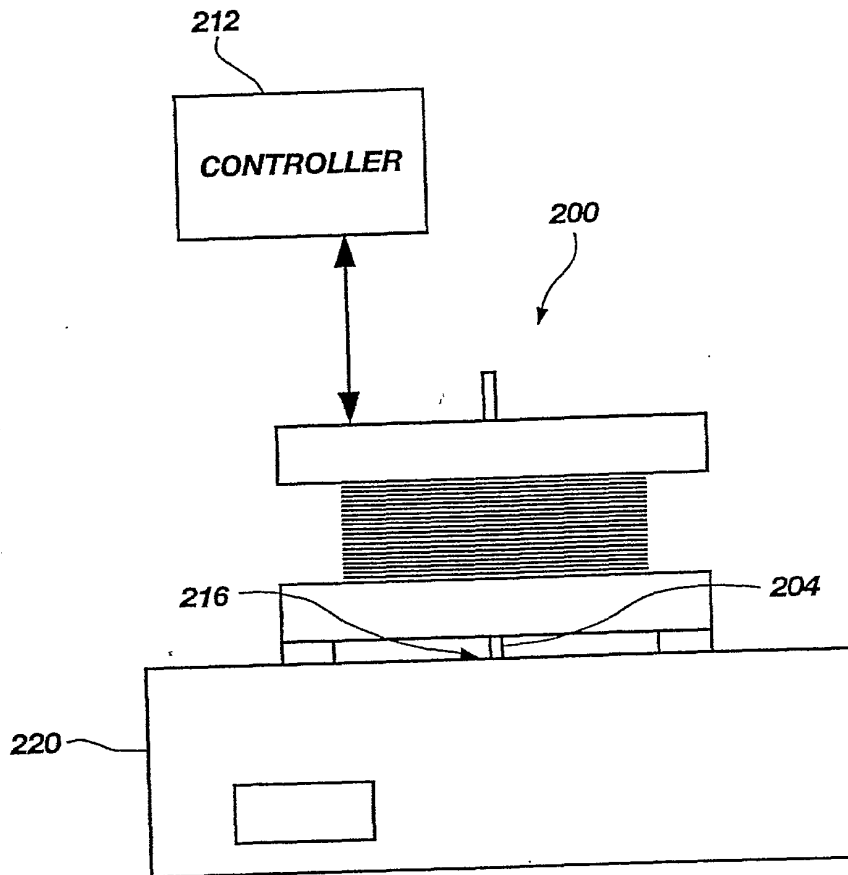


Fig. 28

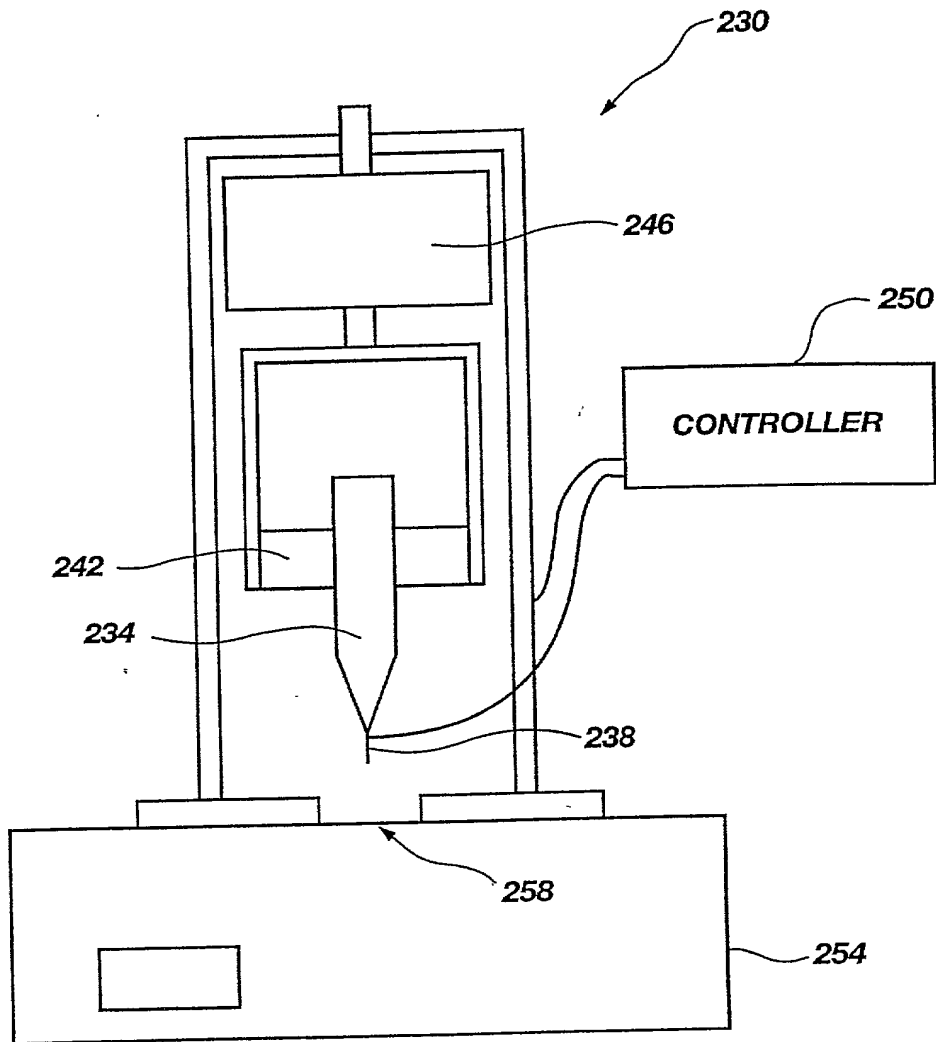


Fig. 29

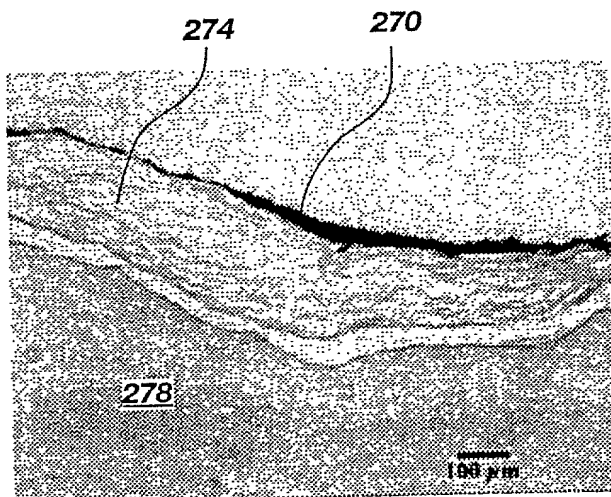


Fig. 30A

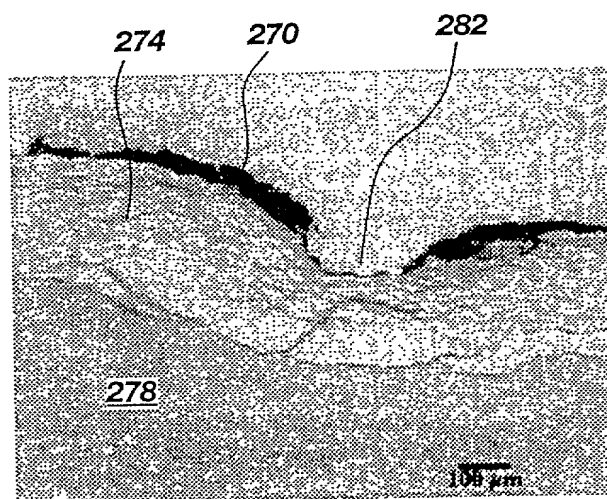


Fig. 30B

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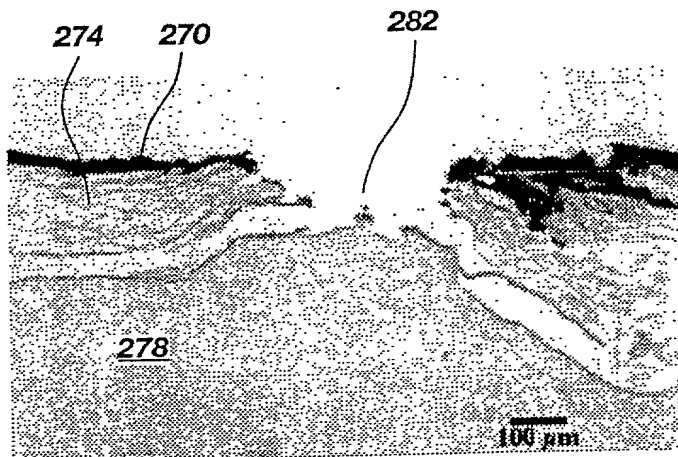


Fig. 30C

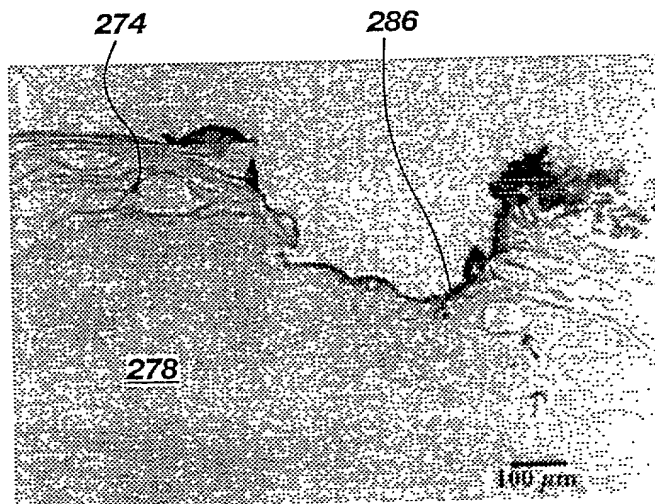


Fig. 30D



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MAXIMUM LENGTH OF A SINGLE HEAT PULSE,  $t = .021$  SECONDS, UNTIL DAMAGE THRESHOLD ENTERS VIABLE TISSUE

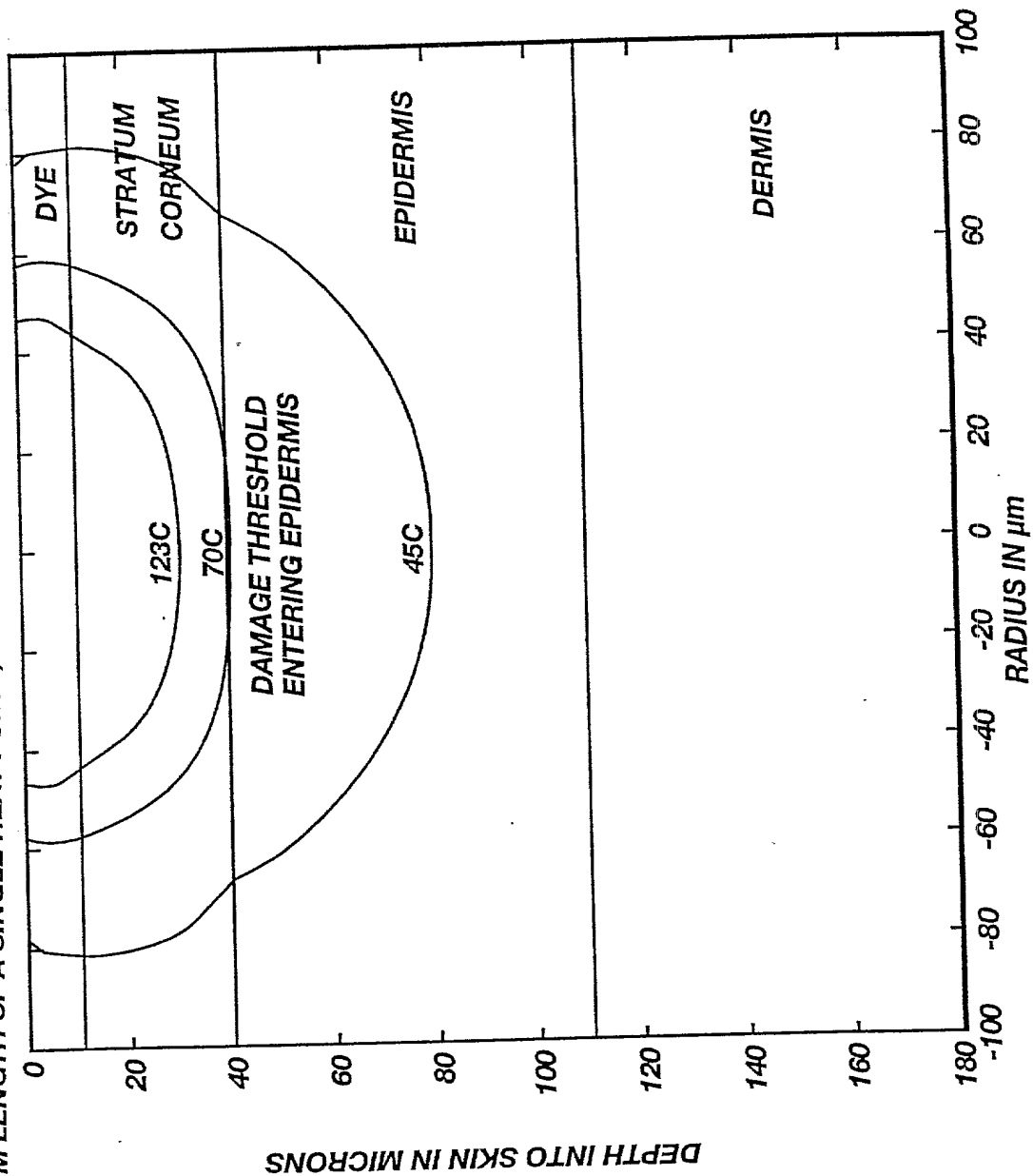


Fig. 3

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MAXIMUM LENGTH OF A SINGLE HEAT PULSE,  $t = .060$  SECONDS, UNTIL PAIN THRESHOLD ENTERS ENERVATED TISSUE

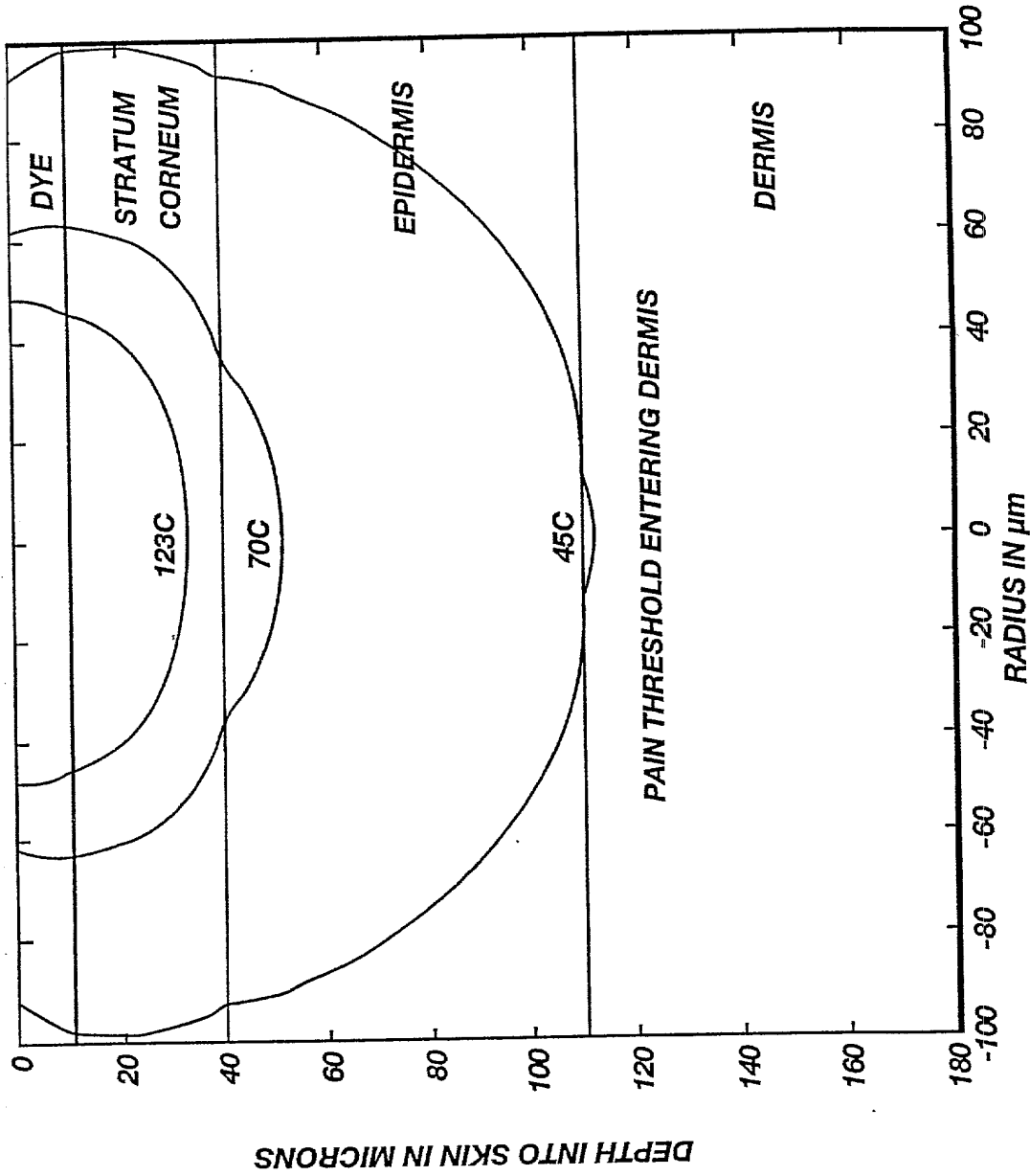


Fig. 32

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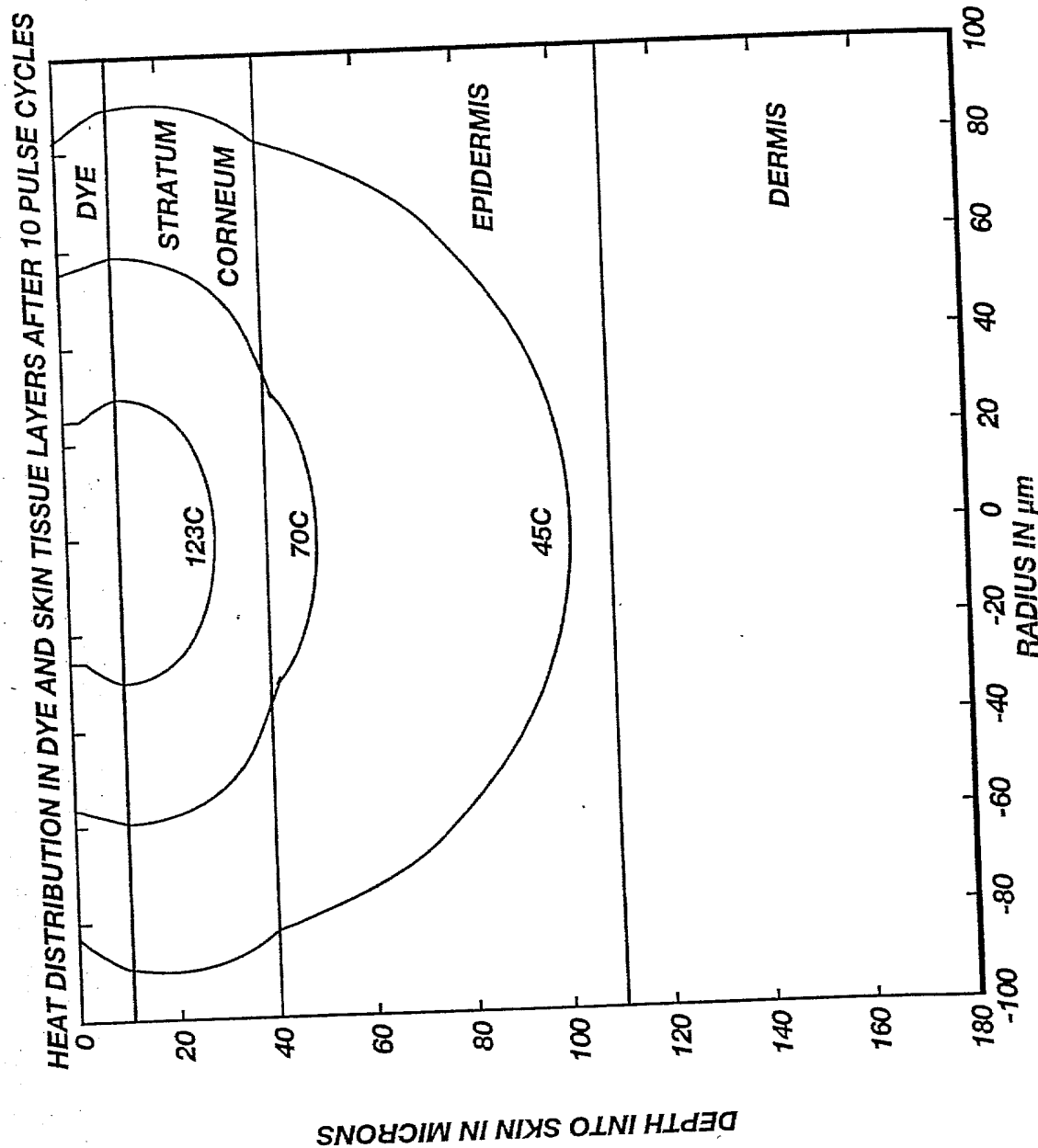


Fig. 33

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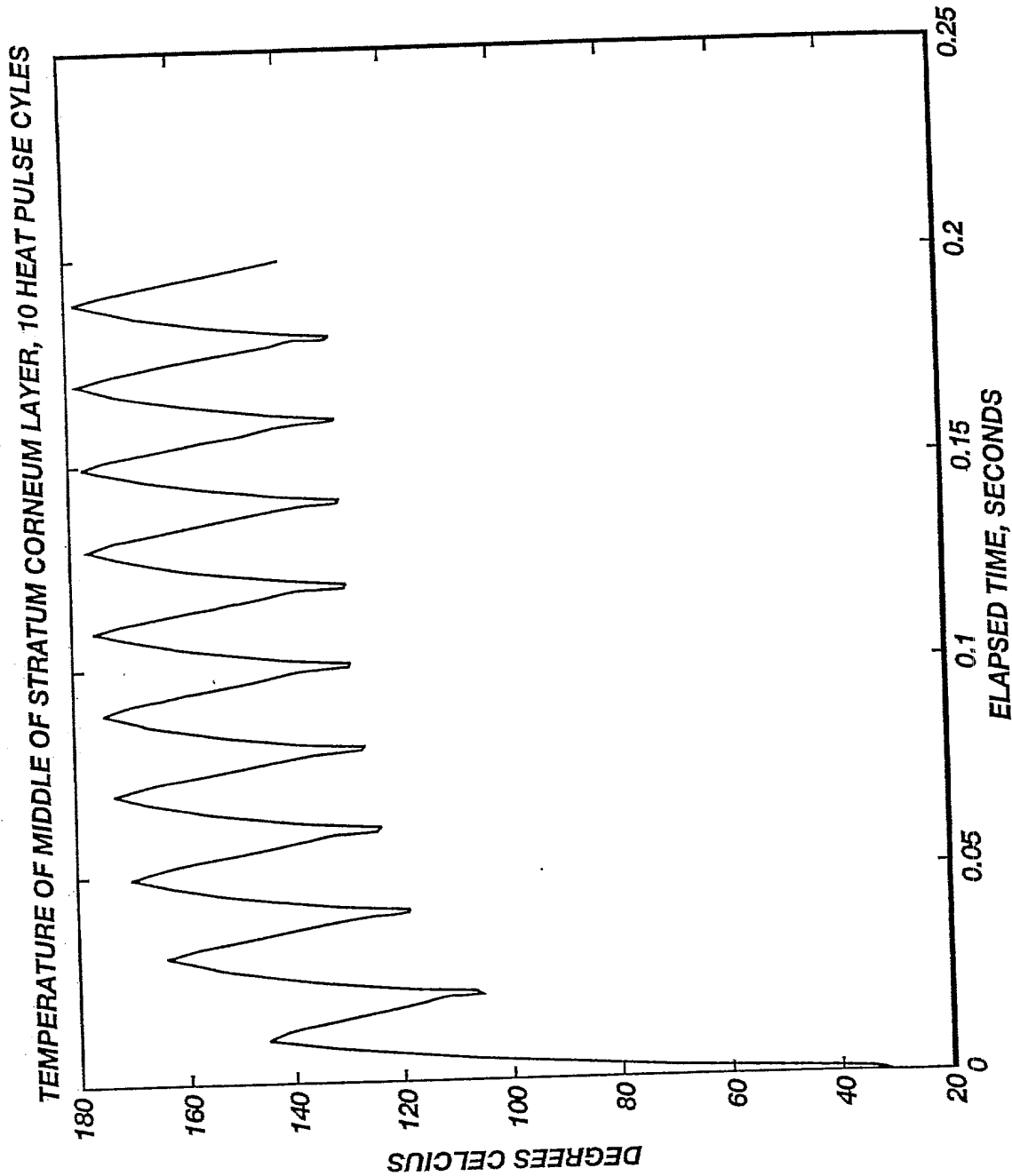


Fig. 34

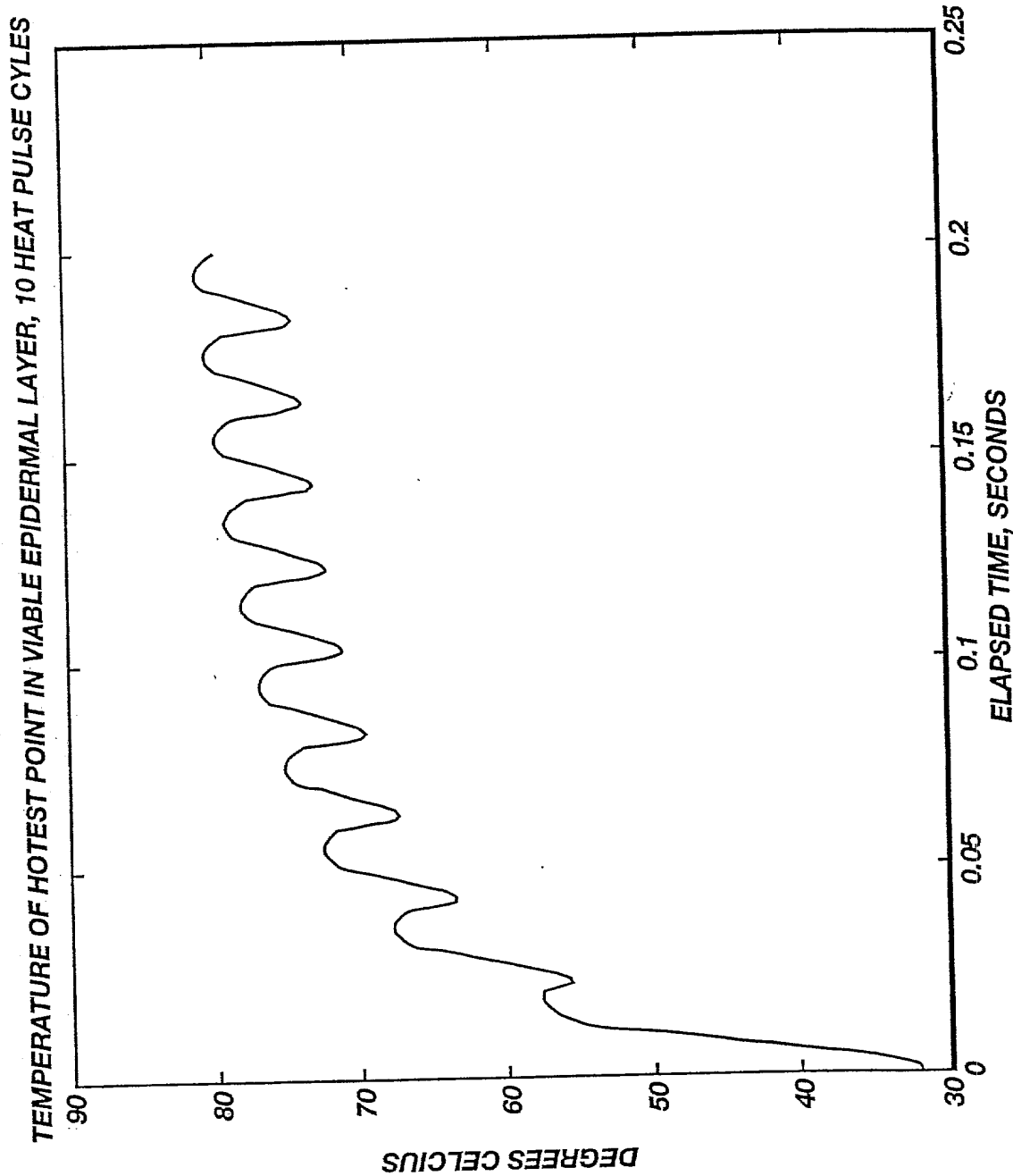


Fig. 35

# HEAT DISTRIBUTION IN DYE AND SKIN TISSUE LAYERS, PRECOOLED, AFTER 10 PULSE CYCLES

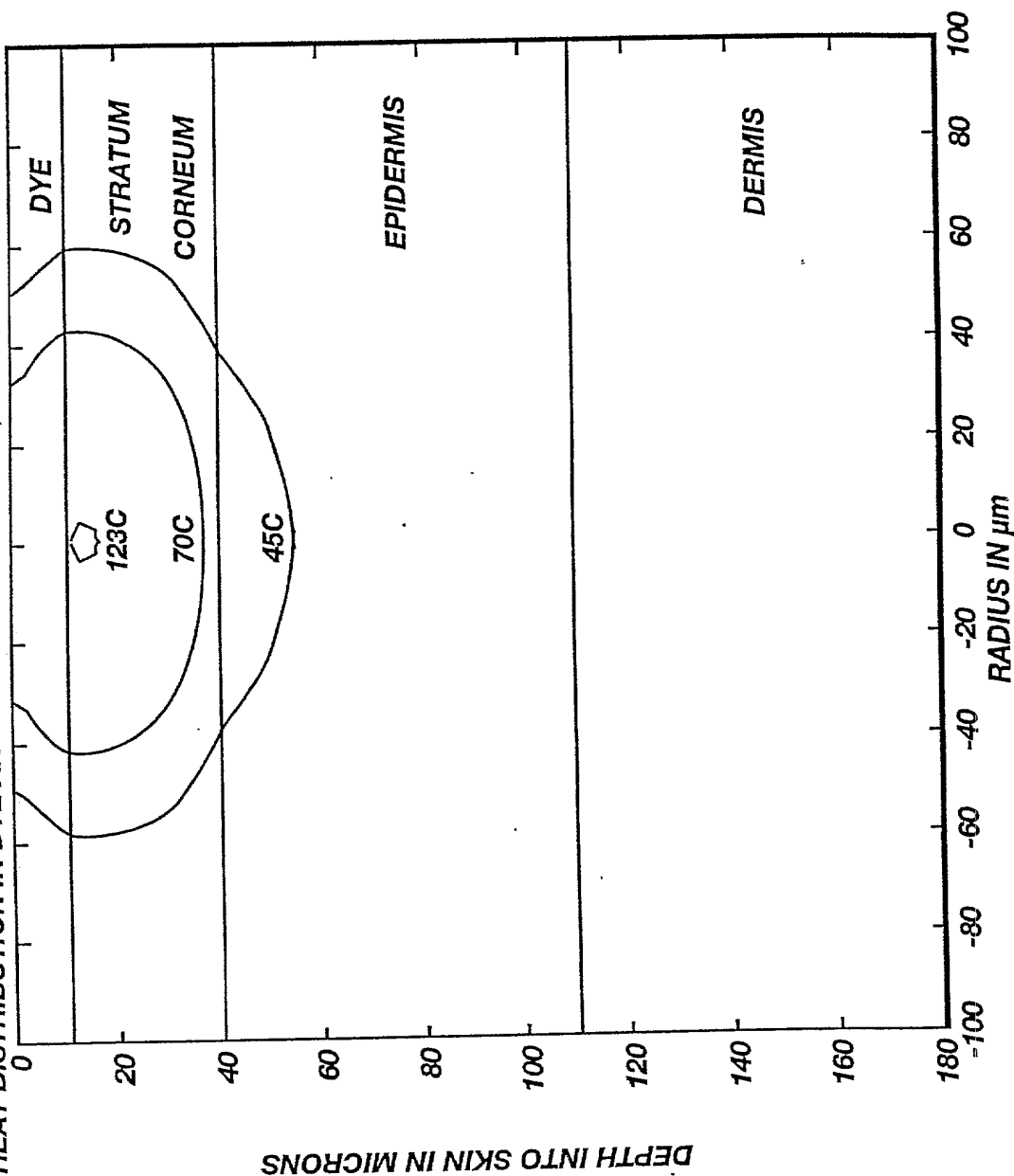


Fig. 36

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TEMPERATURE OF MIDDLE OF STRATUM CORNEUM LAYER, TISSUE PRECOOLED, 10 HEAT PULSE CYCLES

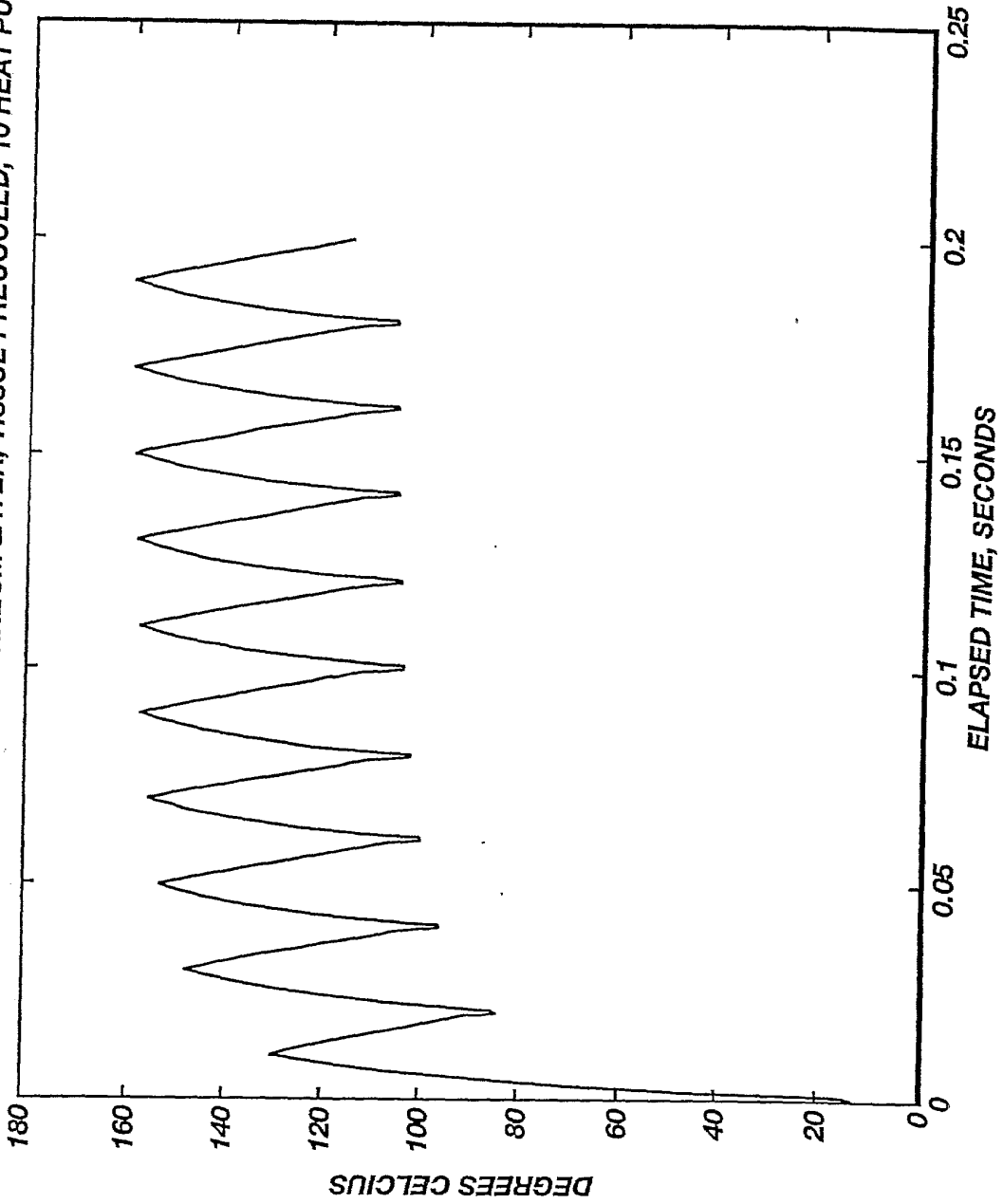


Fig. 37

TEMPERATURE OF HOTTEST POINT IN VIABLE EPIDERMAL LAYER, TISSUE PRECOOLED, 10 HEAT PULSE CYCLES

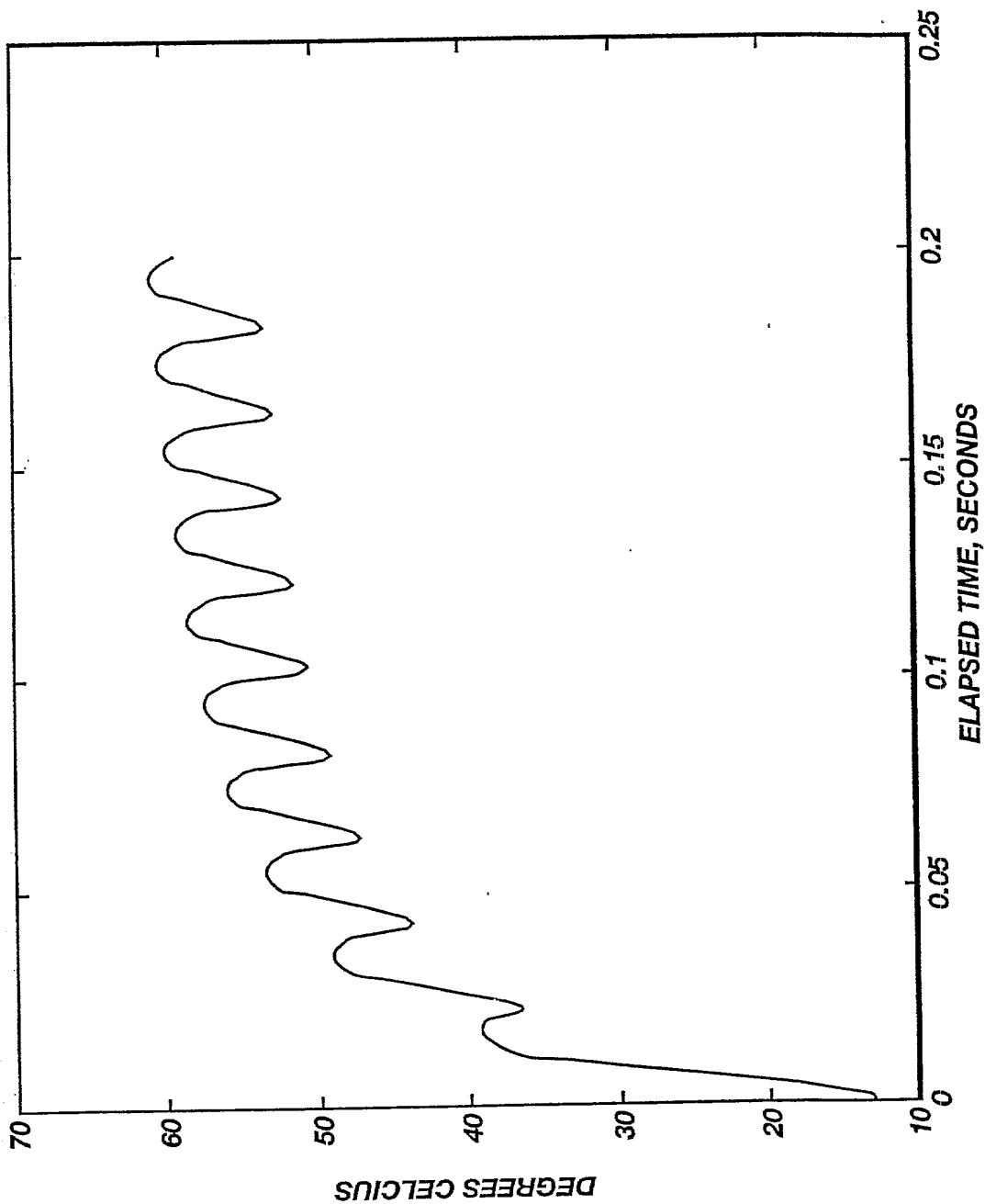


Fig. 38



HEAT DISTRIBUTION IN SKIN TISSUE LAYERS AFTER 10 PULSE CYCLES OF HOT WIRE THERMAL PROBE

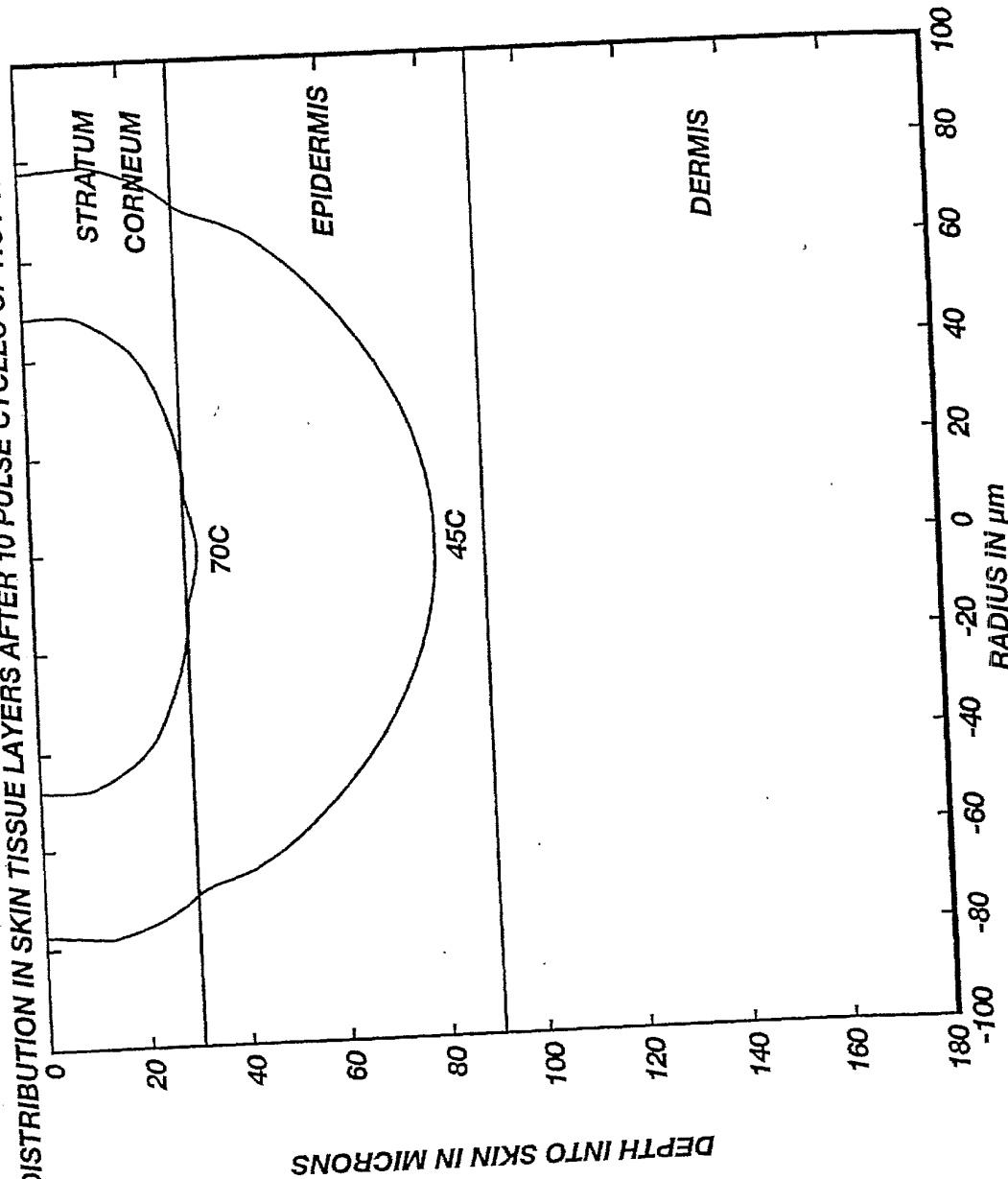


Fig. 39

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TEMPERATURE OF MIDDLE OF STRATUM CORNEUM LAYER, 10 HEAT PULSE CYCLES, HOT WIRE PROBE

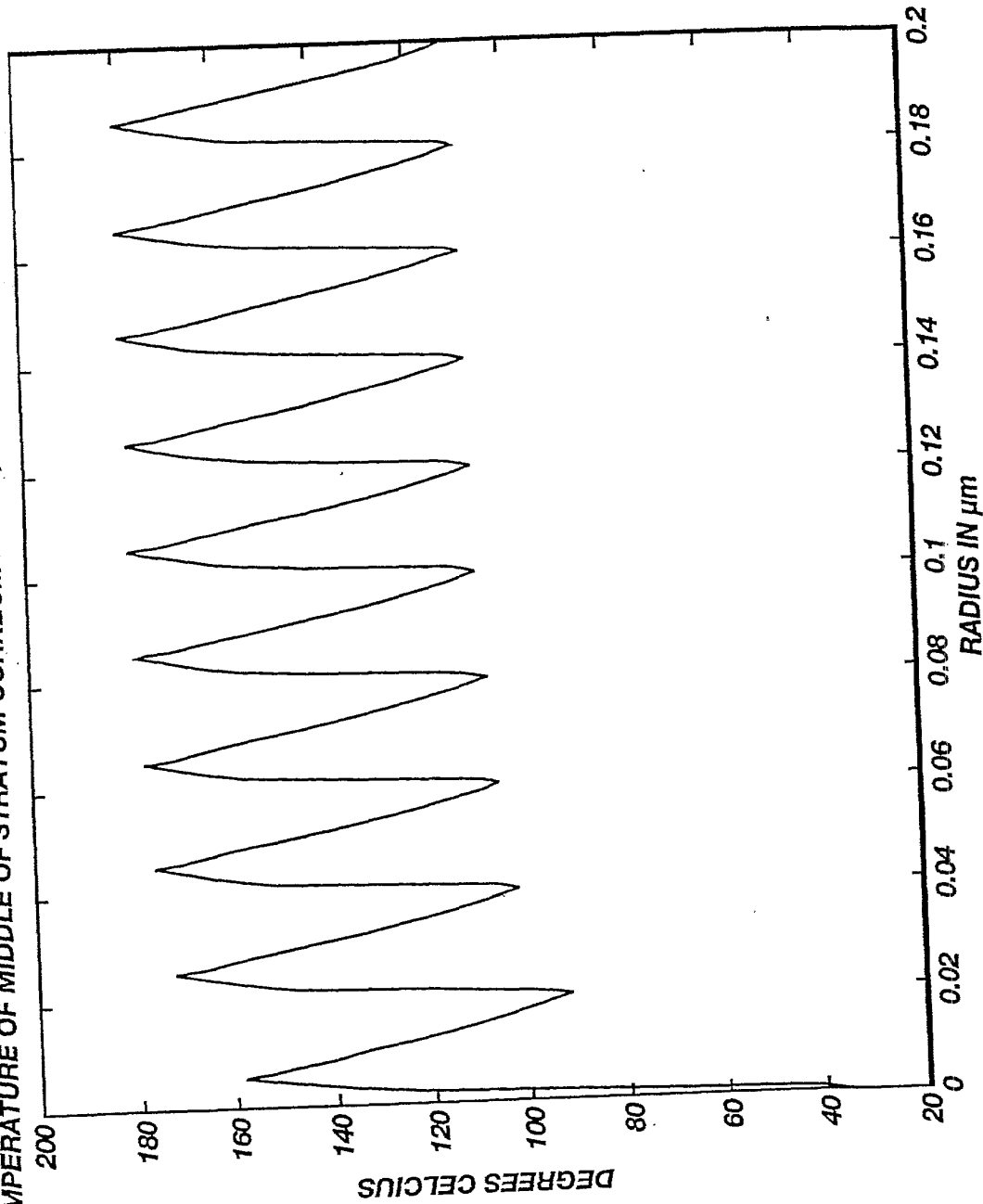


Fig. 40

TEMPERATURE OF HOTTEST POINT IN VIABLE EPIDERMAL LAYER, 10 HEAT PULSE CYCLES, HOT WIRE PROBE

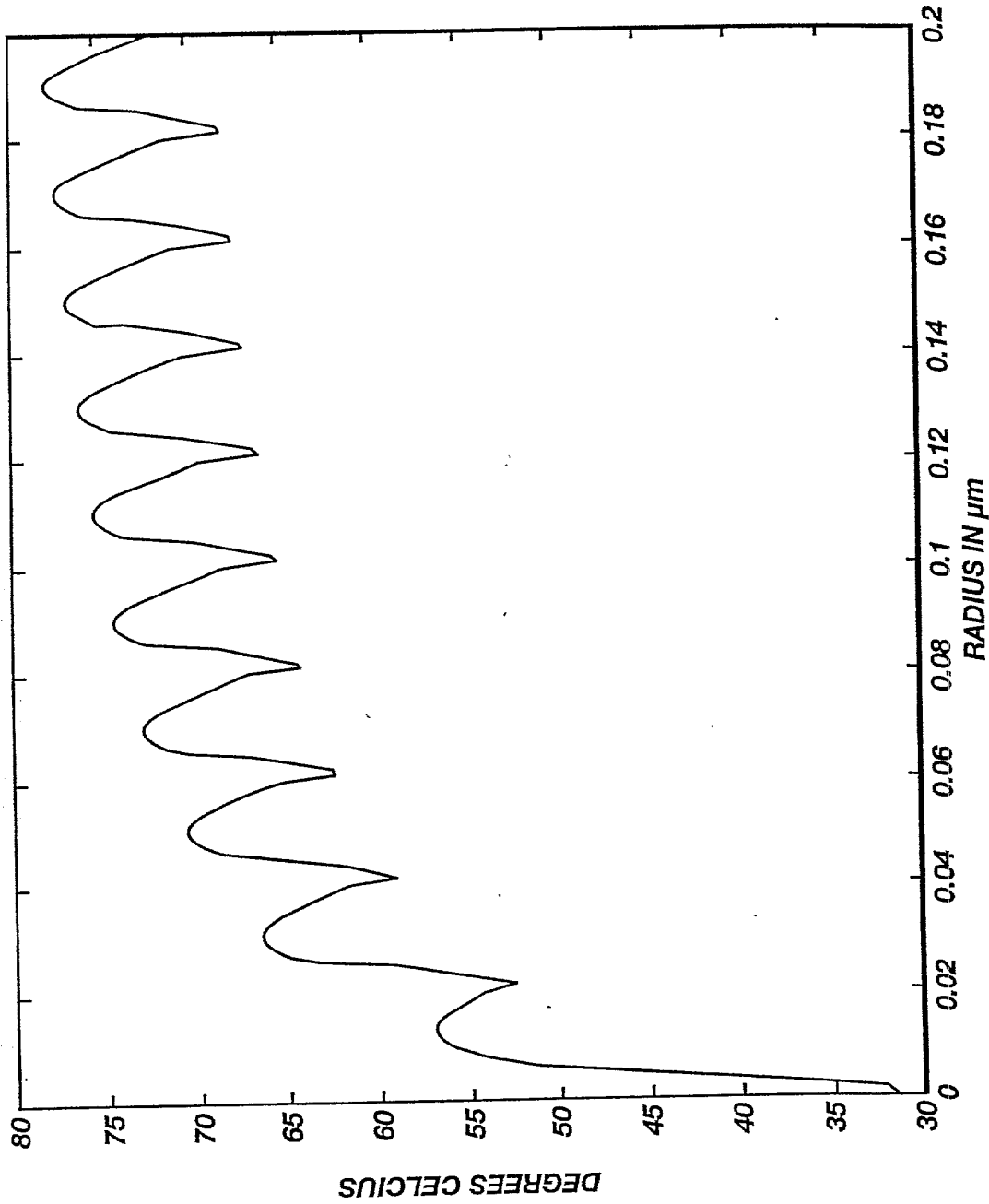


Fig. 41

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HEAT DISTRIBUTION IN PRECOOLED SKIN TISSUE LAYERS AFTER 10 PULSE CYCLES OF HOT WIRE THERMAL PROBE

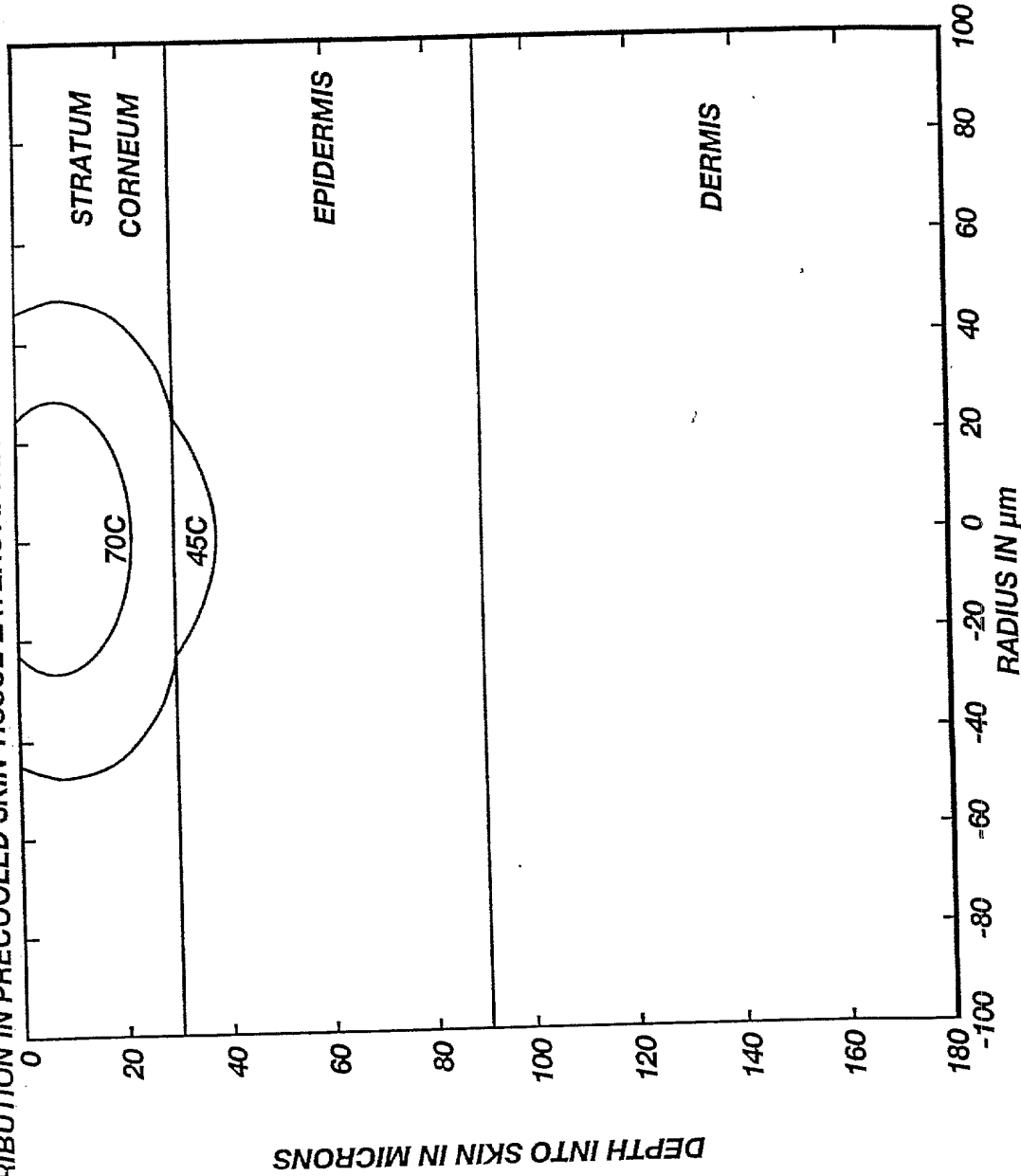


Fig. 42

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TEMPERATURE OF MIDDLE OF PRECOOLED STRATUM CORNEUM LAYER, 10 HEAT PULSE CYCLES, HOT WIRE PROBE

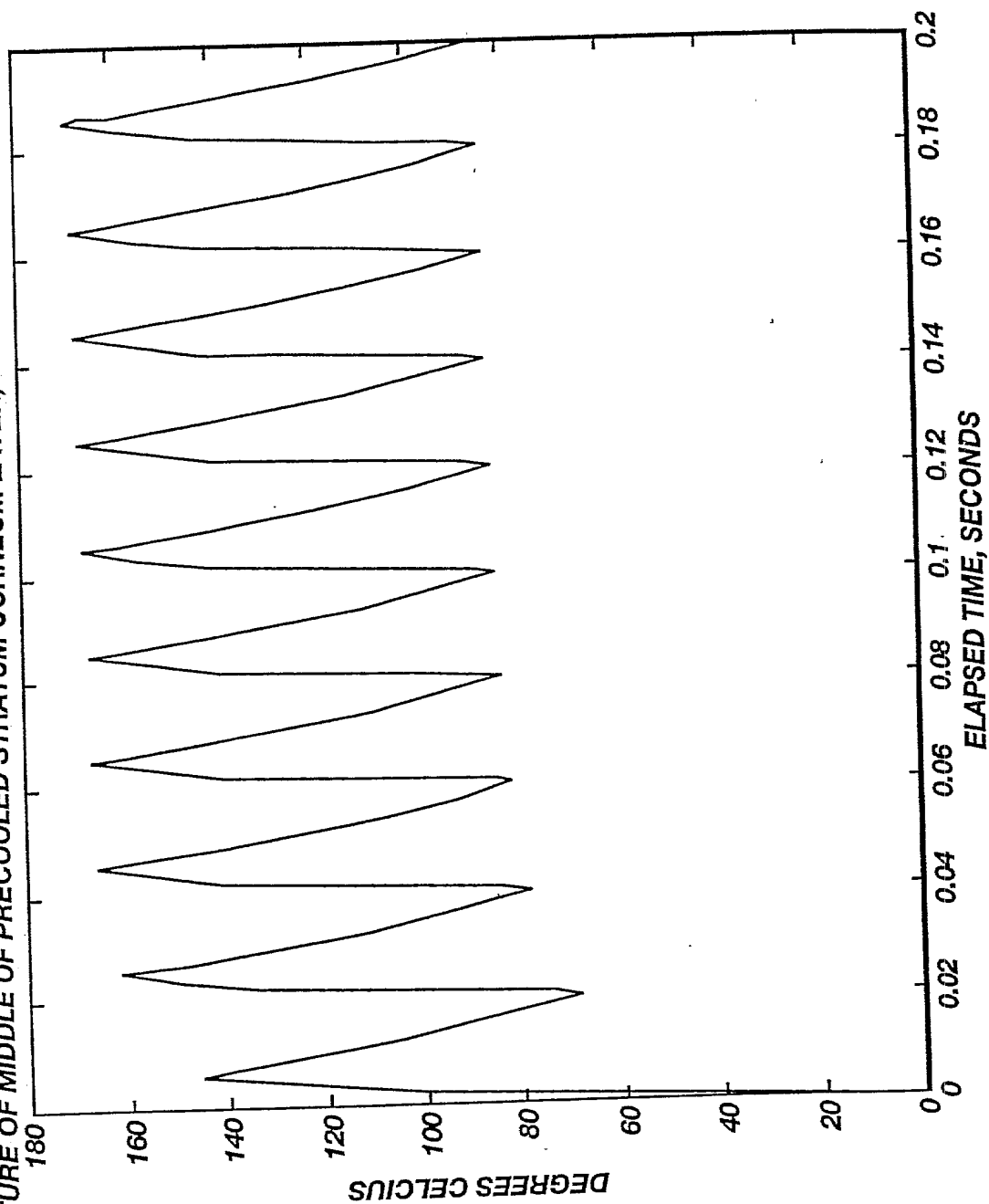


Fig. 43

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TEMPERATURE OF HOTTEST POINT IN VIABLE PRECOOLED EPIDERMAL LAYER, 10 HEAT PULSE CYCLES, HOT WIRE PROBE

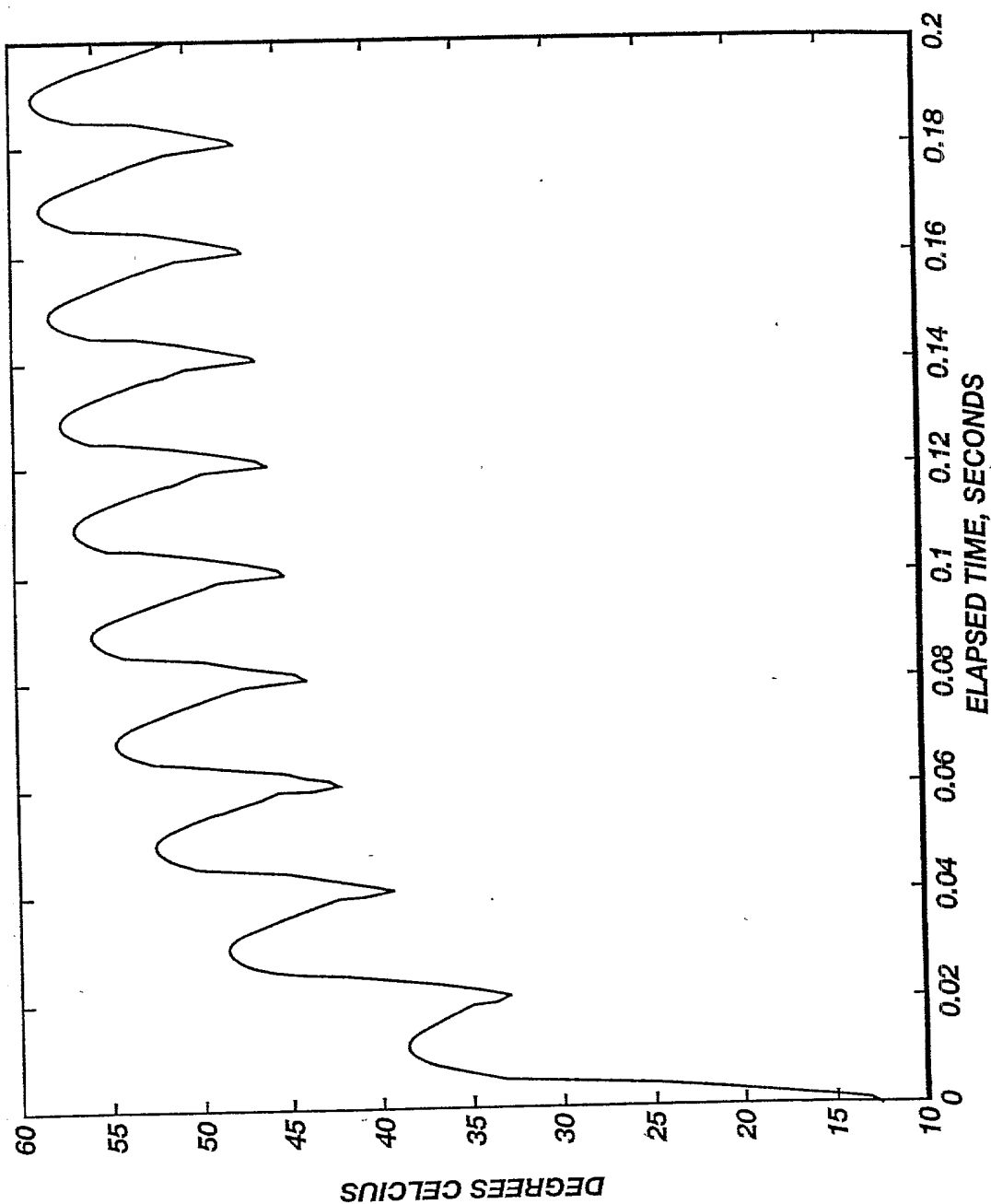


Fig. 44

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HEAT DISTRIBUTION IN CPC DYE AND SKIN TISSUE LAYERS WHEN HIT WITH TANKOVICH 1  $\mu$ S HIGH POWER LASER

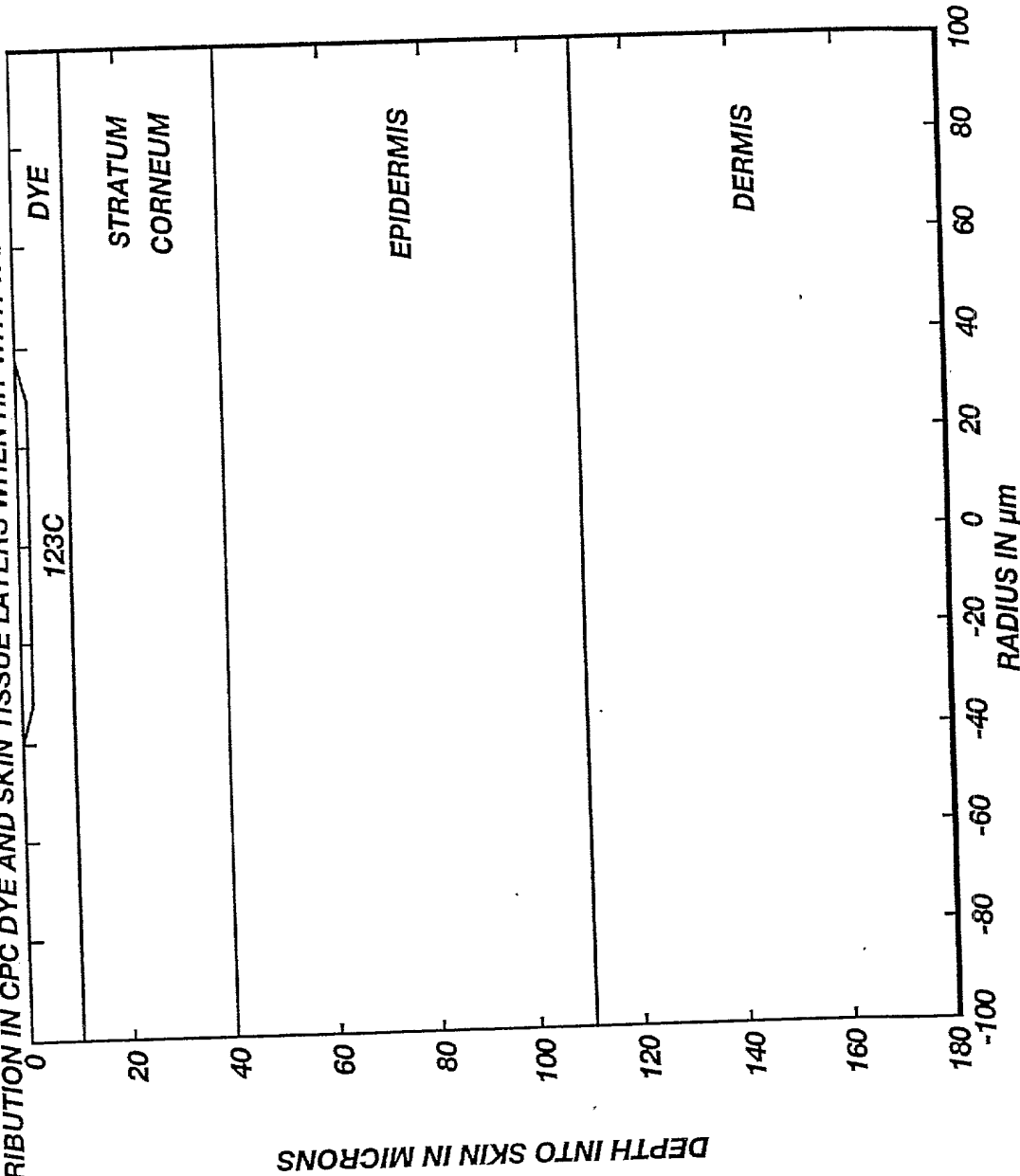


Fig. 45

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TEMPERATURE OF MIDDLE OF STRATUM CORNEUM LAYER, 10 HIGH POWER, 1  $\mu$ S LASER PULSES, AS PER TANKOVICH

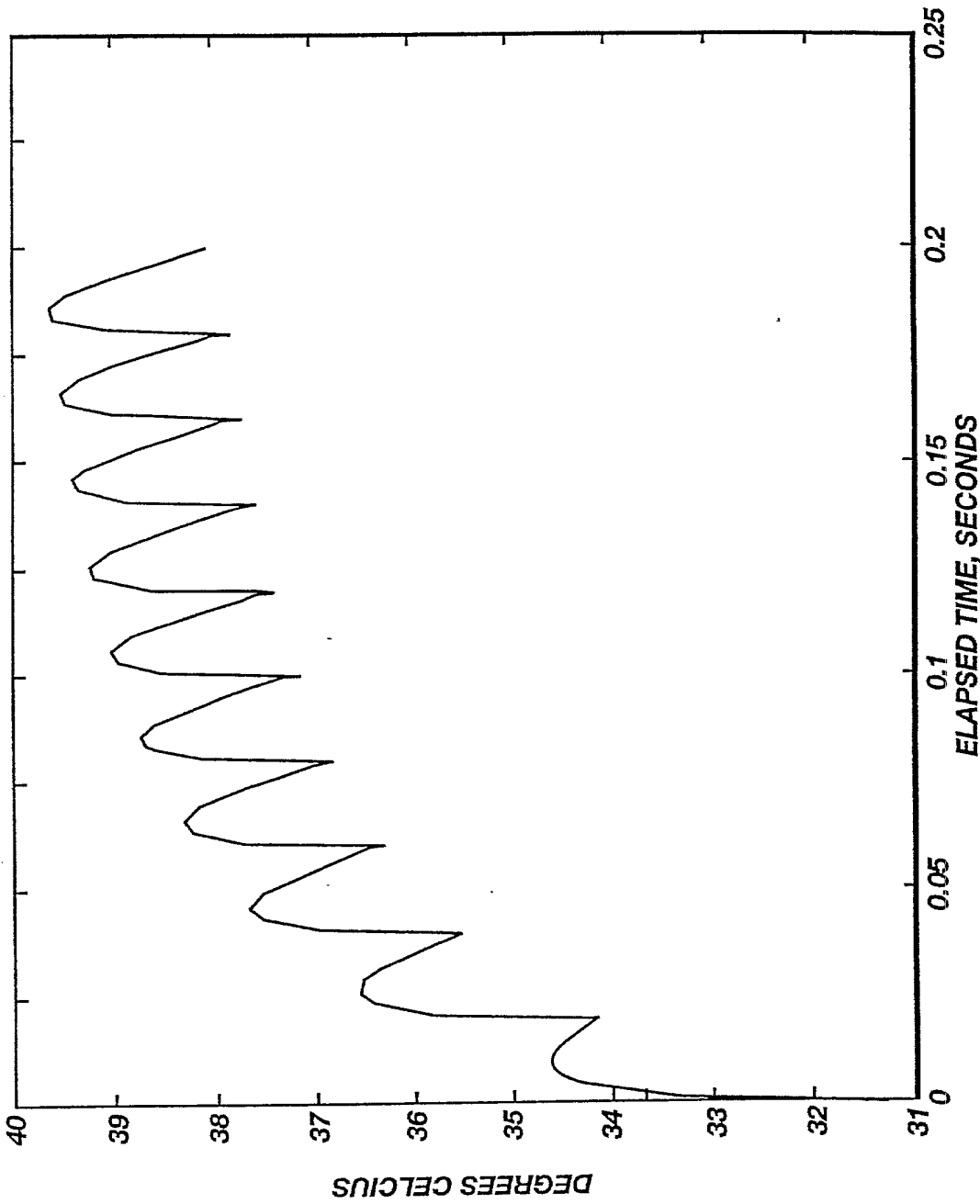


Fig. 46



ISF (o) and Blood (\*) glucose levels -vs- Time, entire data set, Correlation Coefficient  $r=0.95$ ,  $n=438$

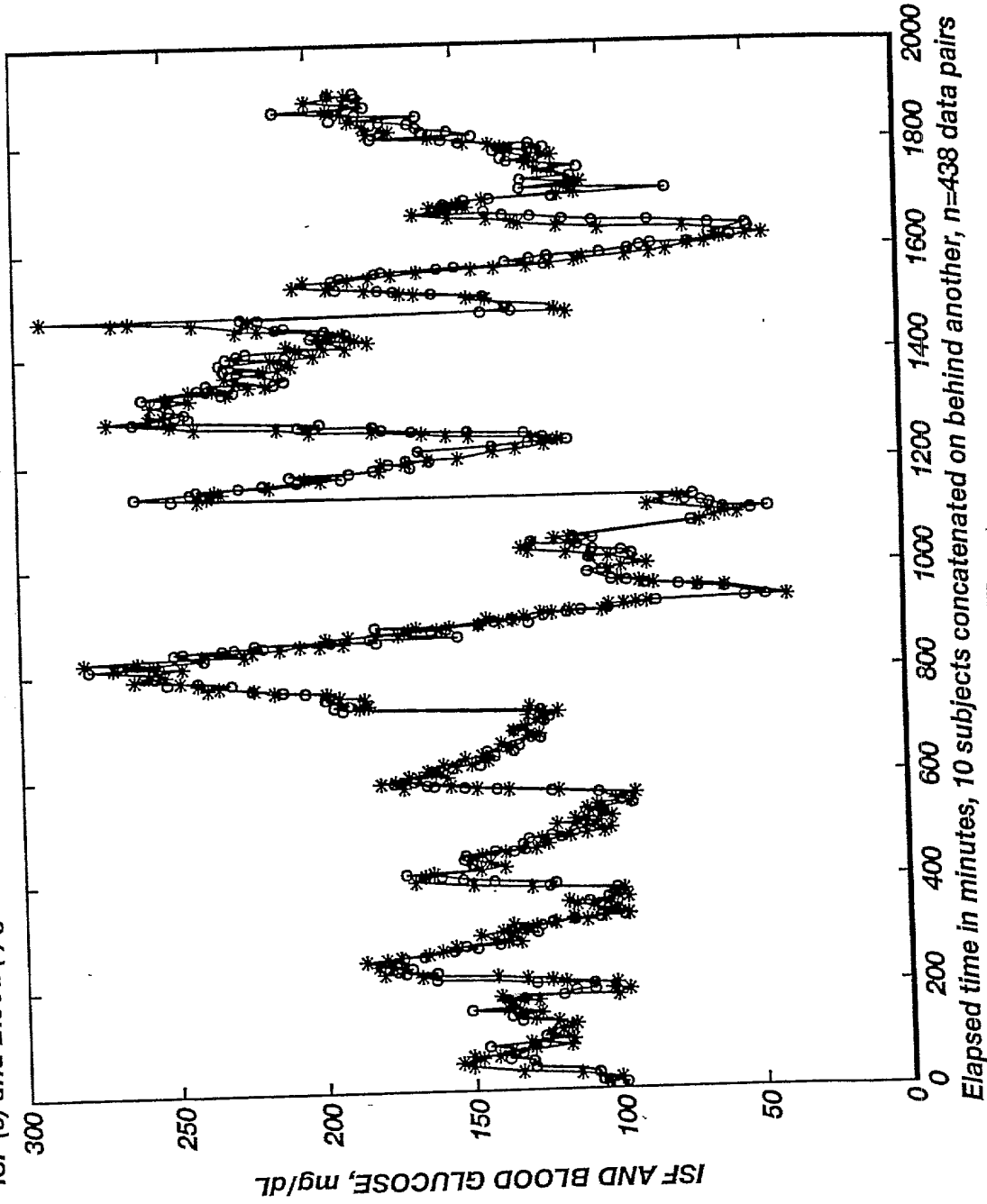


Fig. 47

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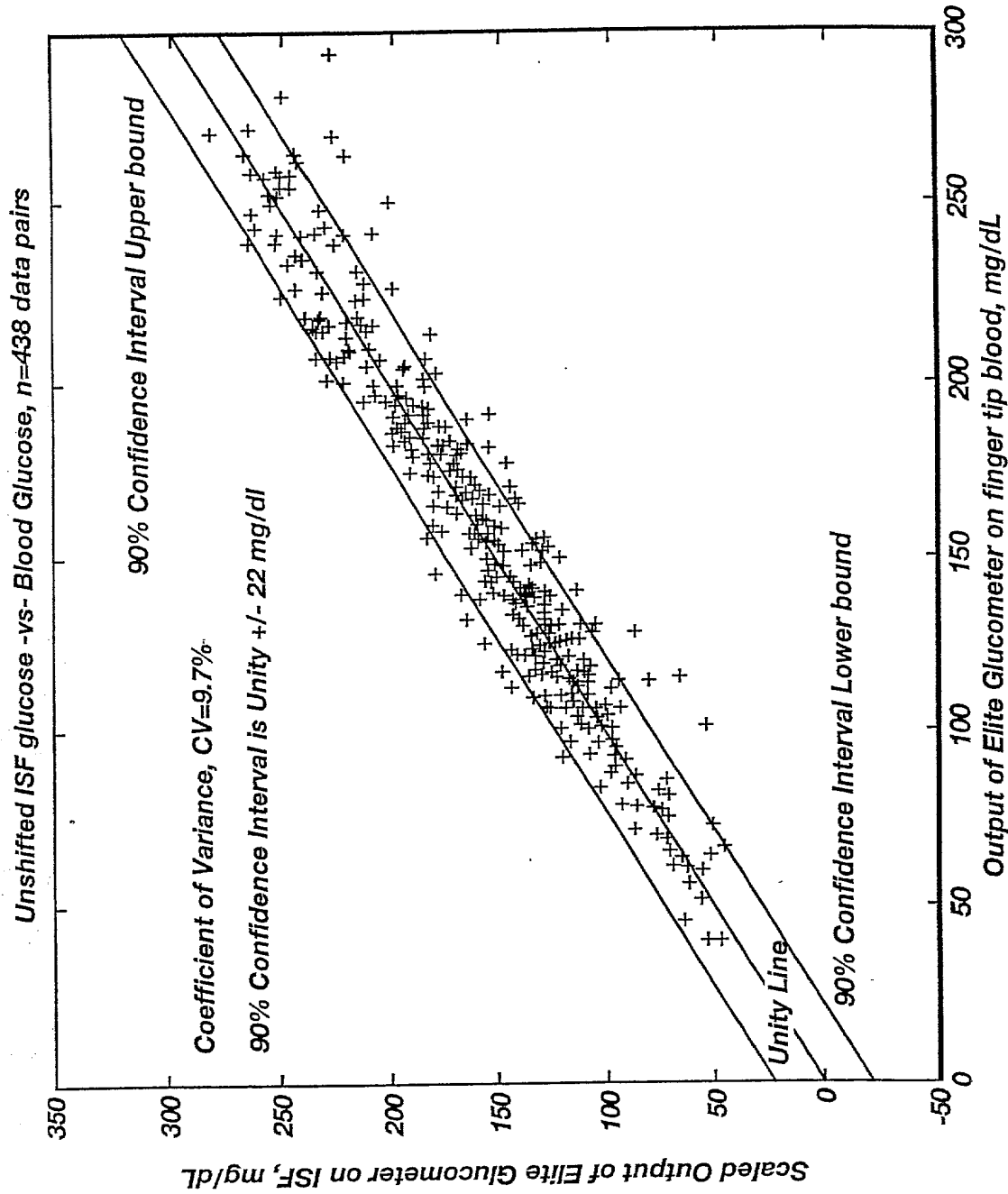


Fig. 48

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Distribution of Relative Difference (Dif/Bld\_level), ISF Glucose to Blood Glucose, n=438 data pairs

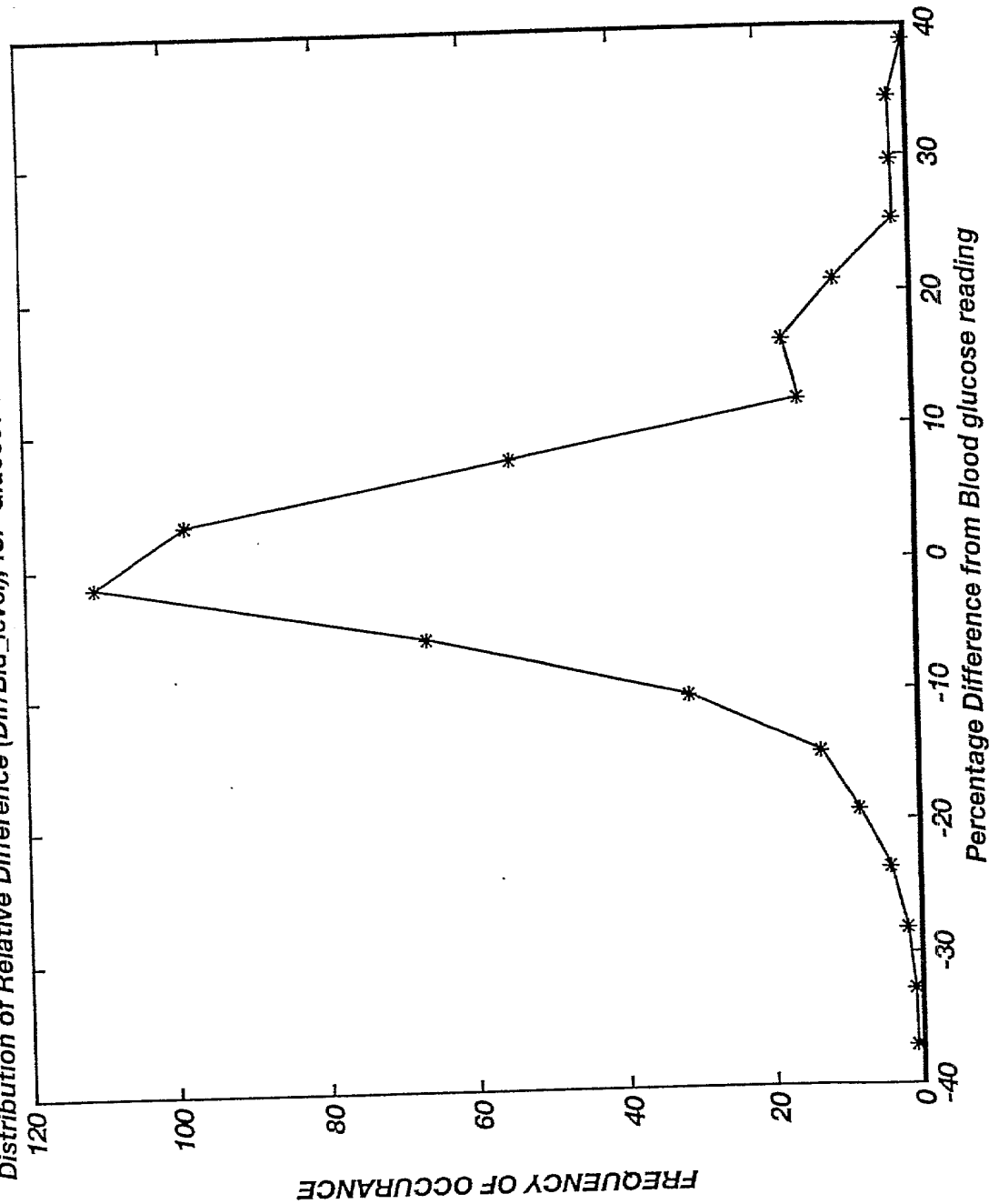


Fig. 49

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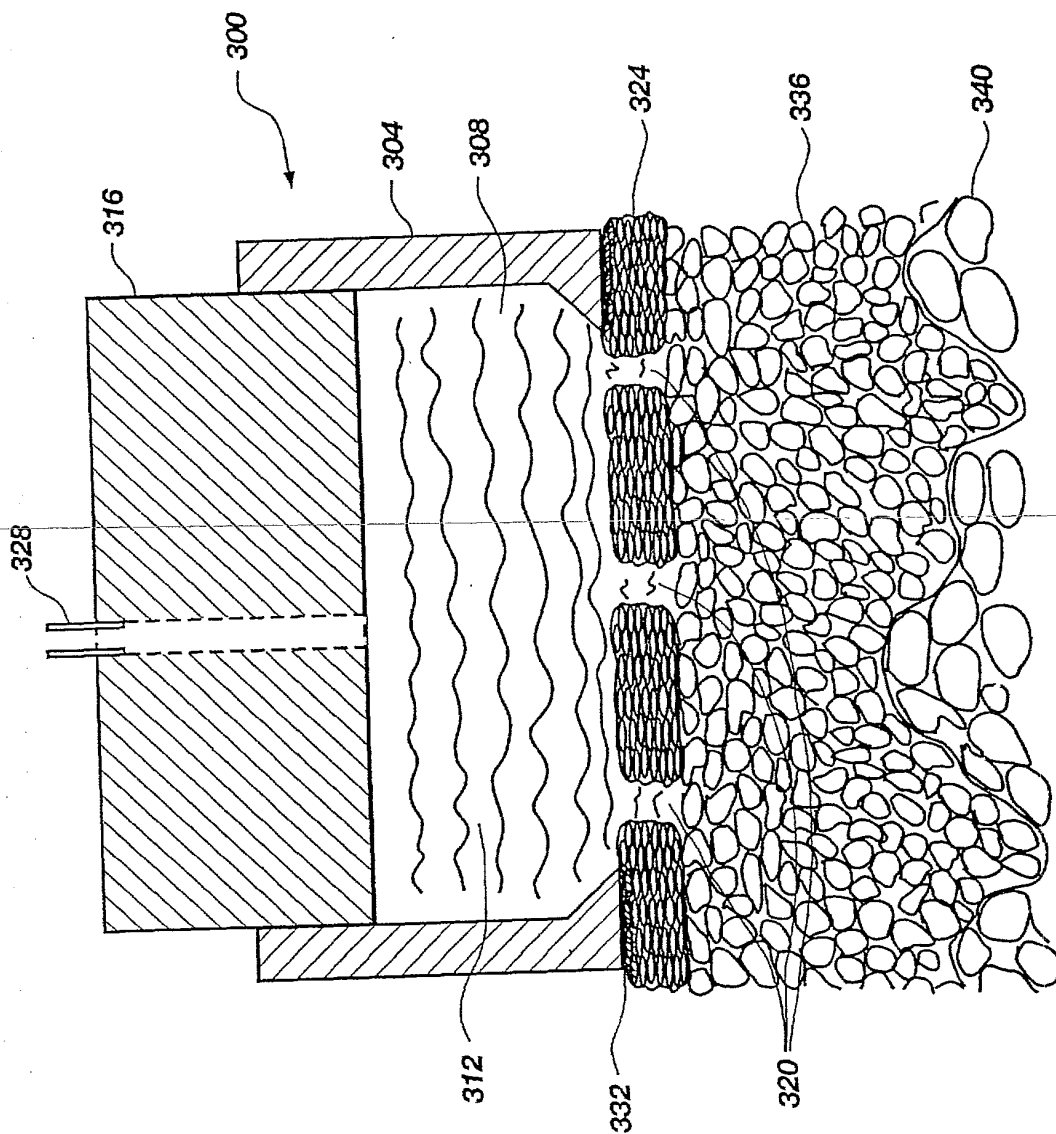


Fig. 50

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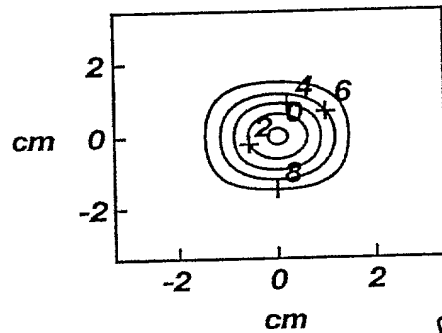


Fig.

51A

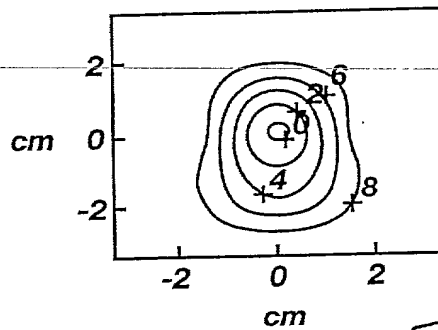


Fig.

51B

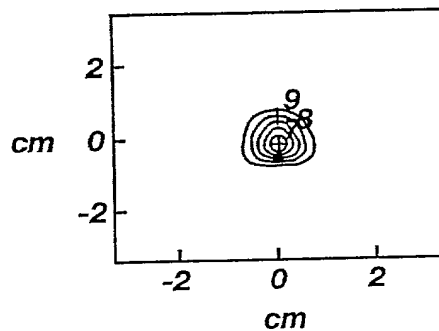


Fig.

51c

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Comparison of volume of ISF harvested in 2 minutes using suction(0) and suction with ultrasound(\*)

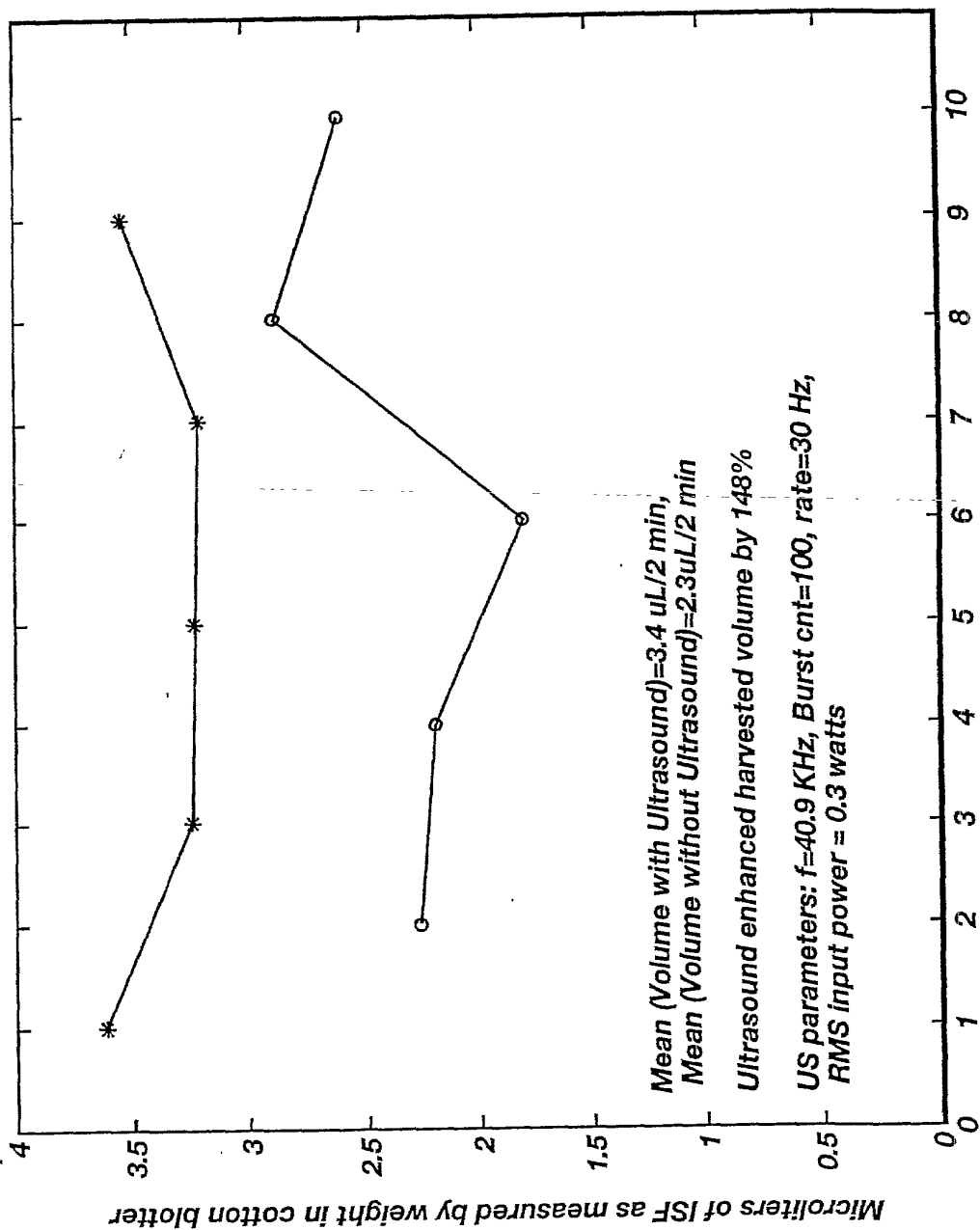


Fig. 52

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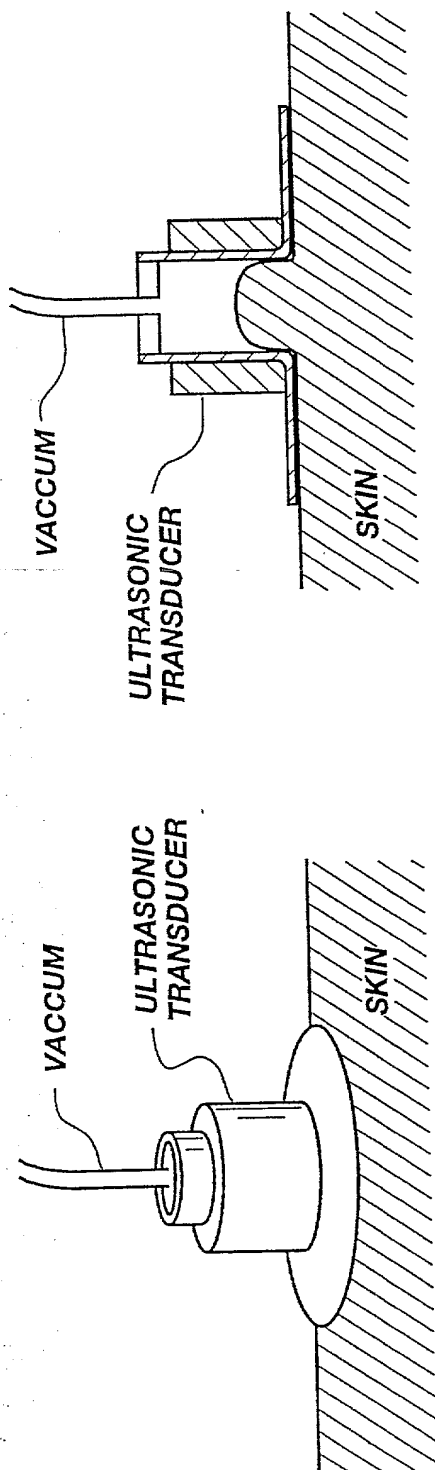


Fig. 54

Fig. 53

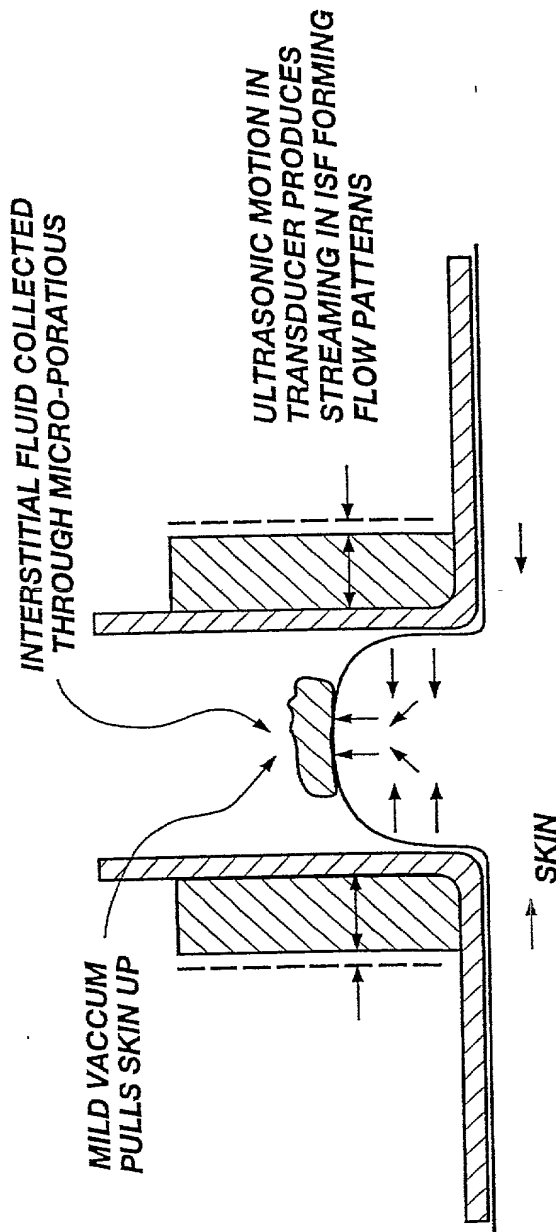


Fig. 55

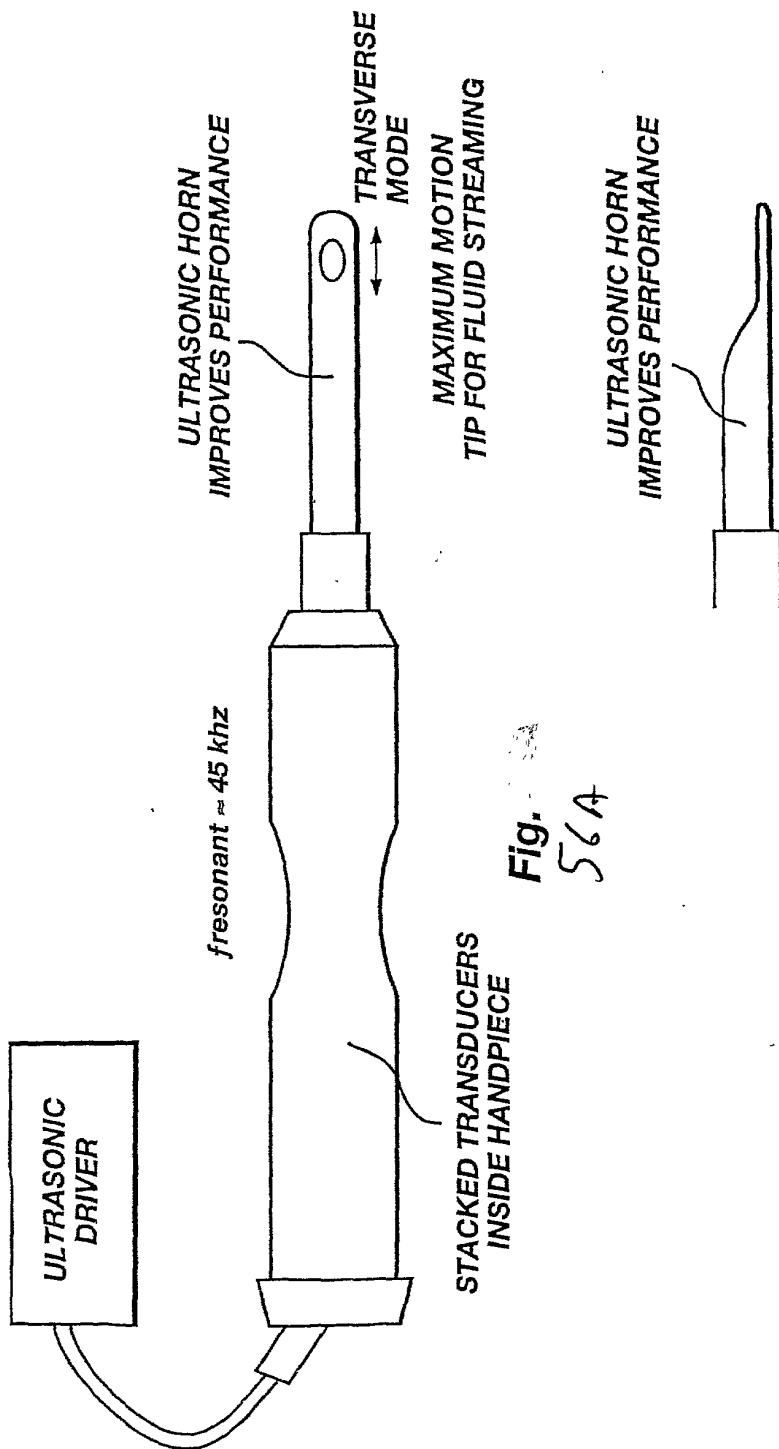


Fig. 56A

Fig. 56B



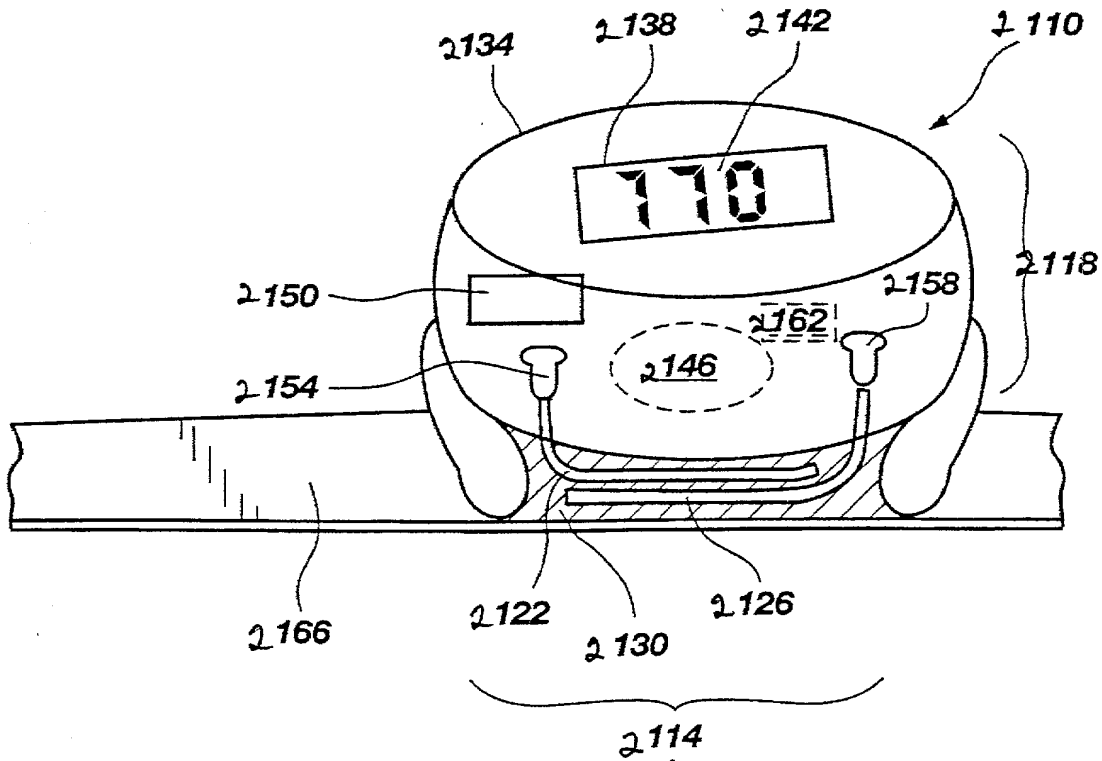


Fig. 5

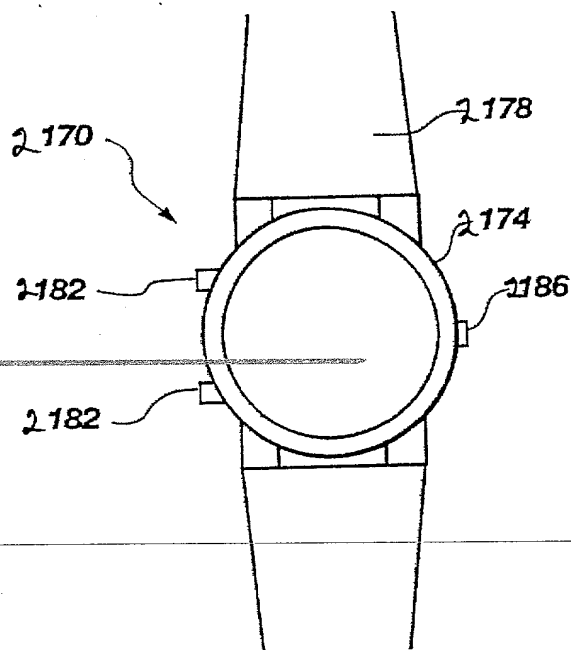


Fig. 58A

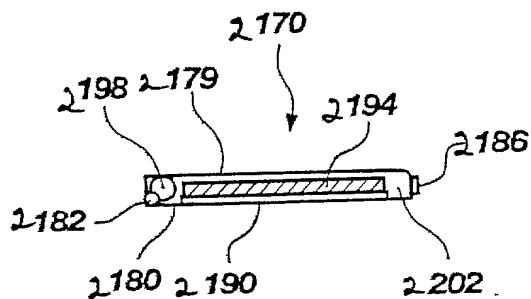


Fig. 58B

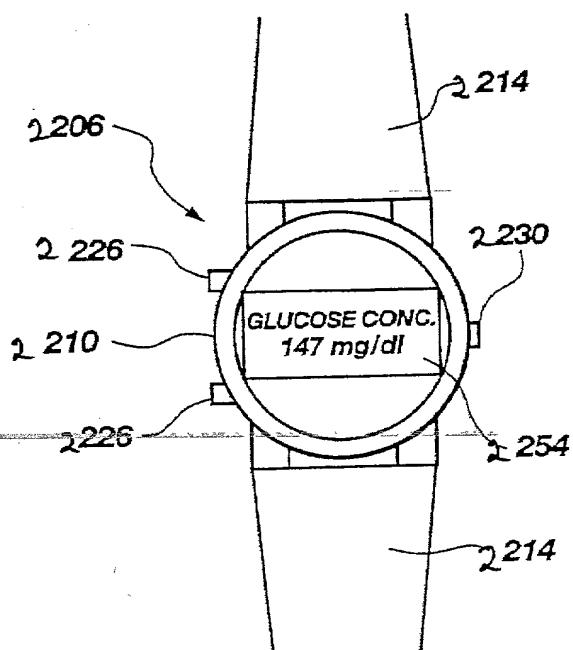


Fig. 59A

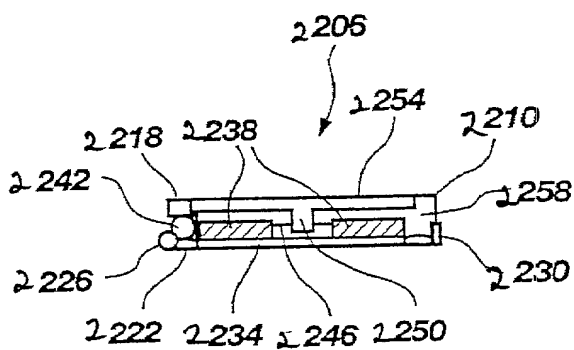


Fig. 59B